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AND EGYPTIAN RESEARCH ACCOUNT
EIGHTEENTH YEAR, 1912

TARKHAN I
AND
MEMPHIS V

BY
W. M. FLINDERS PETRIE
G. A. WAINWRIGHT
AND
A. H. GARDINER

LONDON
SCHOOL OF ARCHAEOLOGY IN EGYPT
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NINETEENTH YEAR, 1913.

TARKHAN I
AND
MEMPHIS V.

BY

W. M. FLINDERS PETRIE

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TARKHAN

INTRODUCTION

1. THE sites of work in the season 1911–12 were varied. In December the ruins of a town a few miles south of Helwan—about 20 miles south of Cairo—were excavated. It bears now the name of Shurafeh; and as a late Roman camp was found there it appears to be the Scenas Mandras of the Itineraries. After about a month of clearing the history of that site, a few days were spent at Atfieh, but it was found that the limits officially stated for our work were inexact, and we accordingly left the site, and settled on the opposite—or western bank.

The main work of the first half of the season was near Kafr Ammar, about 37 miles south of Cairo. There, a widespread cemetery of the earliest dynasties was found, continuing also on a lesser scale down to Roman times. As a distinctive name is required for the early remains, which are the more important, this volume is named from the nearest village Kafr Tarkhān: while the later remains after the ist or iind dynasty will be named from the more general name of Kafr Ammar, the railway-station at a little distance. This is somewhat like naming Drah abul negga for the early material at Thebes, and Qurneh for the later material in general. At Tarkhan we had seven at work altogether. With me were Mr. Mackay, Mr. Engelbach, and Mr. Elverson recording, with my wife drawing, and, during part of the time, valuable help was given by Mr. Lawrence, before resuming his work at Carchemish. At about a quarter of a mile away, Mr. Wainwright was working the southern end of the site. We were here from January 13 to February 25, when I went to Heliopolis. There I worked till April 18 assisted by Mr. Engelbach, while Mr. Mackay was working at Memphis.

The present volume deals only with the early remains at Tarkhan, of the ist dynasty and shortly before, with a few later illustrations which are linked with the earlier. The account of the work at Memphis is also included. The second volume of the year, "Heliopolis I, Kafr Ammar, and Shurafeh" will deal with the remains from the iind dynasty onward at Kafr Ammar, and the whole work at Heliopolis and Shurafeh.

CHAPTER I

THE DATING OF THE GRAVES

2. WHILE the excavations at Tarkhan were going on, it was evident that we had to do with a cemetery which started shortly before the ist dynasty, and lasted through that dynasty in continual use. The main material for comparison was therefore that from the Royal Tombs of Abydos, which are precisely dated. For the earlier part of the period the continual changes of degradation in the wavy-handled jars—or rather cylinders, as they all were at this period—gives a sequence which is of some value. Thus it was evident that we could not well record such a cemetery upon the old notation of the prehistoric *corpus*, which was established in *Naqada*, and amplified by additions from many subsequent excavations. That *corpus* only included the earlier part of our present types; and it was not at all full for those, as it was derived from a cemetery which was mainly of much earlier periods. The present cemetery apparently only started at the northern migration of the dynastic conquerors from Upper Egypt; and it represents therefore the dying out of the prehistoric civilisation, and the growth of the early dynastic system, which lasted on to the vith dynasty, and was not replaced by anything different till the rise of the xith dynasty. In order, therefore, to deal effectively with this period it is needful to regard it apart from the prehistoric, and to treat it as the earlier section of the dynastic history.

3. The prehistoric *corpus* of types of pottery and stone forms was not applicable to such a scope; most of the old types had become extinct, the majority of

forms were new. It is therefore necessary to form a new *corpus* of types for this age; and, I may say, the needs of systematic treatment will probably be met eventually by the following series of *corpus* types:

Prehistoric to mid ist dynasty (*Naqada*, etc.).
Dynasties o to xi (here).
„ vii to xvii.
„ xiii to xxii.
„ xx to xxx.
Dynasty xxvi to 300 A.D.
„ 200 A.D. to 800 A.D.

The time-range of each *corpus* must overlap those before and after it, in order to show the earliest growth and the latest degradation of the types. Owing to the very different characters of the forms in various periods it would be impossible to keep the same notation for a particular type through all the series; hence the notation of each *corpus* must be independent of that used in the others. The one general principle in all cases must be that of beginning with the most open forms, such as flat plates, and proceeding to the most closed forms, such as bottles.

4. In the present treatment of the material, therefore, we have to start with a fresh *corpus*, and an entire re-numbering of all types, whether they have appeared before, or no. The old prehistoric *corpus* was actually used during the course of the excavations, largely supplemented by additional forms. This caused some difficulty when it had to be used apart by four recorders, and many revisions of it were needed during the work. The whole of these stages have now been passed, and a consistent new *corpus* of the early dynasties has been formed for pottery, and another for stone types, with due regard to the forms that will still have to be inserted in order to carry it on to the close of the Old Kingdom. Every designation of forms in this volume is entirely upon the new *corpus* here published, except in the Conversion Table (pl. lxviii) where such old types as survived are equated with the new numbering. The old distinctions, which are so prominent in the prehistoric age, of Polished, Black-topped, Decorated, Wavy-handled, Rough, and Late pottery were scarcely traceable in the dynastic age, and no distinctive forms belong to different materials. Hence the class letters, such as P, B, D, W, R, and L—though always required for the prehistoric *corpus*—are no longer of use in this age, and all forms are classed into one uniform series from 1 to 99. For general reference in future, where not dealing with one single age and *corpus*, it may be requisite to designate each *corpus* by a letter prefixed to the type number, so as to distinguish to which *corpus* reference is being made. I would suggest for such a purpose, to prefix O for the present *corpus* of the Old Kingdom, M for the Middle Kingdom *corpus*, E for the Empire, T for the Transition xx–xxx dynasties, G for the Greek, and X for the Christian period.

5. We may now note the stages of the present classification of POTTERY.

1st. All types of cylinder jars (descended from the older wavy-handled jars) were noted in their groups as found together in each grave. From these groups it was seen that—though the continuous degradation of the decoration was evident—the various types had been many of them in use at the same time. There were, however, some distinct breaks in the usage of the forms. Types 46 *b* to *p* were generally mixed, as also were the later types 47 *p* to 49 *l*; while the intermediate types 46 *r* to 47 *m* were linked more often to the later than to the earlier division. Broadly speaking, the wave decoration, 46, held together; while the jabbed patterns, 47, ran down into, and mixed with, the cord patterns, 48, and the line patterns, 49. The plain types, 50, also came into use along with the cord pattern, but were more generally alone.

2nd. Having thus some distinctive groups, the order of which was certain, the other pottery associated with each of these groups was set out, in order to see which types belong only to one or other group. From these restricted types the other graves not containing cylinder jars were then added to their contemporary groups.

3rd. The great jars, type 76, were next compared with those found in the Royal Tombs of the ist dynasty, which show a continuous decline in size and detail from dynasty o down to the end of dynasty ii. Thus all graves containing these were classed in groups according to the style of this pottery.

4th. On reviewing the results, it appeared that it was useless to try to distinguish single reigns in the dating of the graves. A clear distinction could, however, be seen between the grand style of the reigns of Narmer, Aha and Zer, the feebler work of the end of Zer and of Zet, the coarser but abundant products of Merneit, Den and Azab, and the decadent style of Semerkhet and Qa. Thus four periods are apparent in the ist dynasty.

5th. It therefore seemed best to continue the system of sequence dating numbers on through the early dynasties, as a convenient notation. Taking the materials set out and discussed in *Abydos* I, from the pottery sequence dates, the Royal Tombs, the great private tombs M 1 to 26, and the levels of the town deposits, the following scale of relations of these various dates was adopted.

	S.D.	Cylinder types	Kings	M. tombs	Town level
Dyn. 0	77	46, 47			0
	78	48, 49	Ka		20
			Ro		
		49	Nar-mer		
	79	50 *a–g*	Aha		40
			Zer	1, 12, 13, 15	50
Dynasty I	80	50 *h–o*	Zet	18	55
	81	50 *p–s*	Mer-neit	14, 16, 17, 26	60
		51 *d–m*	Den	19, 24	70
			Azab		75
	82	52	Semer-khet	25	80
			Qa		
Dyn. II	83		Ra-neb		
	84		Perabsen		110
	85		Kha-sekhemui		
	86	early iiird dynasty			

Henceforward these equivalents will be adopted in this account. The cylinder types are those of the middle of the groups of cylinders found used together. In a grave absolutely dated by the name of Ka were found types 47 *h*, 48 *g*, 49 *l*, and 50; while in a grave dated to Narmer were found 48 *s*, 49 *l*, and 50 *d*.

6th. Having now a large part of the graves dated by the cylinder jars and the great jars, the pottery types of all these graves were set out in their respective periods, 77 to 82. Hence the range of each such type of pottery was shown in a table. All other graves that could be dated by their pottery were then dated.

7th. These results were all tallied with the register-cards, and the cards were then dated and arranged in groups of each period apart.

8th. A final list of all pottery types that could be thus dated by association was then formed, see pl. lix.

9th. All drawings of STONE vases were compared with all the stone vases already dated in *Royal Tombs*, *Abydos* I, *Gizeh and Rifeh* and other publications. Every dating comparison was noted on each drawing.

10th. All the datings thus reached for each grave were put together, as the grave-dating resulting from the stone vases.

11th. All the datings by pottery were then compared with those given by the stone vases. Any differences found between these, or between the stone datings, were examined in detail, to see which evidence should yield to the other. Thus a revision of some of the card-datings of the graves was made, and the resultant dating of each grave finally inked on the card.

12th. A list of the stone types, with their ranges of date of each type, was formed from the finally arranged materials, see pl. xlv.

13th. Tables of the contents of the graves were made in accordance with the finally reached dating of the graves, and the *corpus* notation of the pottery and stone, see the registers pls. lx to lxvii.

Such were the various stages in brief, though various modes of handling and searching the record vase by vase, was required in each stage, which need not be described in detail here.

6. It is not claimed that in every case a grave can be certainly fixed to a single sequence period; those graves which were without distinctive pottery may sometimes have an uncertainty of date ranging over two or three periods. This uncertain minority are placed here each in the middle of its range; and it is open to any one to test the closeness of dating of any grave by looking for the range of date of each of the varieties of pottery and stone types in the dating lists of types. Those graves which only contained a single type of pottery and no other objects, or only types which had a very wide range, were of no value as evidence, and would merely impede further researches. These useless records were less than a sixth of the whole, and have not been tabulated.

In the tables of graves, the order and arrangement has been adopted which made the lines most continuous, and therefore easiest to be followed by the eye, leaving those columns which were seldom used to come at the end of the line. The types of pottery and stone are sorted into their principal divisions, so that it may be easy to run the eye down to pick out any type that is sought.

It may be desired to find out what the evidence is, on which the sequence date of any type of pottery or stone rests. In the list of types, the periods in

which it is found, and the number of graves in each period, can be seen. Then on the tables of the burials, that type can be quickly looked for under its periods, and all types associated with it can be noted. The range of date of all these associated types can then be readily found in the tables of types, and hence the degree of certainty of the period of the type in question. In any such question of revision of results it is generally found that several graves hang together, and that to shift the date of one requires others to be shifted with it. Many such revisions have been made in the course of this classification. At first many more graves were credited to period 82, but it was found that there was no serious reason for separating them from period 81, and only half a dozen graves were left, which seemed to go to the close of the ist dynasty. It is probable that a scanty series of graves did thus continue, as there are other graves which by their forms, modes of burial, use of head-rests, and absence of pottery and stone, seem certainly to belong to the iind and iiird dynasty. These cannot be classified like the present series, and are dealt with by Mr. Mackay who recorded nearly all of them.

7. Beside thus putting in order all the material from Tarkhan, it seemed highly desirable to render comparable with it the cemetery on the other side of the Nile at Turah, excavated and published by Dr. Hermann Junker (*Denkschriften der Kais. Akad. in Wien*, lvi. *Bericht über die Grabungen . . . auf dem Friedhof in Turah, Winter* 1909–1910 . . . *Wien* 1912). This account is the most practicable one yet published of a series of graves, and it is useful to unify it with the Tarkhan results of the same age and region.

For this purpose the numbers of the pottery and stone types need to be converted into the numbers used in this *corpus*. In doing this for the pottery types I found about 50 to be added to the 350 we had drawn. These additional types are therefore drawn into this *corpus*, as well as I could manage to do so from the photographs. A photograph is far inferior to a good scale drawing, as the top and base are foreshortened, and the detail of the most important points—the neck and bottom point—are generally lost in skew view and shadow; hence I have only interpreted the photographs as well as I could. The scales were not given with the types, but were recovered from the groups of pottery, so that the drawings here are to the same scale as those from Tarkhan. The stone vases were similarly compared, and fresh types drawn; but no scale is given with any photographs of these, and I had to recover it from chance appearances in the photographs of graves. For the register of whole graves, photographs are generally inferior to a good hand record. No photograph shows the whole contents at once, the levels vary too much; and details in views are often difficult to understand. The experience of practically extracting information from the 46 plates of photographs shows more than ever the advantage of hand drawing for practical purposes. A good drawing is far nearer to a type specimen of pottery than any second specimen that will be found, hence it is abundantly accurate, while it renders detail of the geometrical form which no ordinary photograph will give. The real function of photographs is to give complex artistic detail. As regards registration of graves, the risk of cleaning a grave to be clear for photography, without shifting the contents, is at least as great as the risk of not drawing objects in true place; while as to questions of good faith in registration, the cleaning all the gravel and sand out of the grave before photographing and exposing the objects undisturbed in place, is a process quite as personal as the drawing of the contents.

It may save some confusion if it is stated that Dr. Junker does not attempt to classify his graves into dated order, beyond making comparisons of some hieroglyphs and marks with those already known of the Dynasties 0 and i. In the "Report on the Human Remains" some graves are assigned to the iiird dynasty, without stating the grounds; and here these will be found classed to the close of the ist dynasty, by the styles of the pottery and stone vases found in them. The actual graves of the iiird dynasty are entirely different, not having vases, but wooden head-rests.

Many of the Turah graves—like those of Tarkhan—do not yield any distinctive information, and to encumber lists with such material is only a detriment. All the graves which contain a variety of types, of value as associated groups, are here reduced to the same notation, and published in the same way, as those of Tarkhan. Some of the graves of Naga ed Deir, published by Dr. Reisner, have a sufficient variety of pottery or stone vases to date them in the same way; these are therefore also included in our tables. We have then here, on a uniform notation, all of the material of the earliest dynasties which shows the general culture in the north end of the Nile valley, as apart from Abydos

and Naqadeh, which show the southern culture. Our study now must be to trace what we can from this series of remains.

CHAPTER II

CHANGES TRACEABLE IN THE EARLIEST DYNASTIES

8. ONE of the most obvious details of a burial is the direction of the head and face in the grave. As these changed several times, it is a distinctive question in Egyptian burials. In the present period all the burials are contracted with the knees and thighs bent. Reducing the numbers of instances to percentages in each date, the whole of the burials of each date yield, for the head direction—

S.D.	N.	E.	S.	W.
77			67	33
78	56	4	36	4
79	35	0	55	10
80	30	3	57	10
81	43	2	51	4
82	67		33	

In 82 the numbers of directions known (3) are too few for the numbers to have much value. In the other periods (where there are 9, 25, 29, 64, and 51 examples) the results are distinctive; the majority are south, about a third north, and about a twelfth west. The north direction is, however, dominant in 78. Now this is curious, because in other sites the prehistoric are south and the dynastic north. It seems that there was a dominance of dynastic style at first, relapsing into a dominance of earlier style. In the tomb of king Qa (S.D. 82) we have 5 north to 1 south, but that was under strongly dynastic influence. At least we see clearly that the dynastic influence did not increase, but somewhat diminished.

The directions of the face, in percentages, are—

S.D.	N.	E.	S.	W.
77	25	13	..	62
78	4	40	4	52
79	10	31	..	59
80	13	25	..	62
81	6	44	2	48
82	..	33	..	67

We see that the westerly direction is always dominant, the easterly about a third, and a few to the north. There is no sign here of any general tendency to alteration with time, the custom was stationary in the population.

If now we separate these into male and female bodies, we find for the head direction, the number of burials is—

	N.	E.	S.	W.
Male . . .	13	2	34	1
Female . .	14	..	15	6

Hence the preponderance of southerly direction is entirely in the male burials, the females being buried equally to north and south.

If we take the face direction—

	N.	E.	S.	W.
Male . . .	4	15	1	31
Female . .	7	12	..	16

the same is seen, that the preponderance of west facing is male.

There are too few examples to draw conclusions as to the differences between Tarkhan and Turah in each period; but at least in S.D. 78 we find the N. to S. proportion is 6 to 7 at Tarkhan, but 8 to 2 at Turah, so that the early preponderance of north burials that we noticed is due to Turah only.

The preponderance of head and of face directions are clearly connected, and if we reduce them to burials on the right and on the left side we find the number of burials is—

	Males.		Females.		Unknown. Tarkhan.		Unknown. Turah.	
	R.	L.	R.	L.	R.	L.	R.	L.
77	..	2	..	3	1	2	..	..
78	2	7	2	..	..	4	1	10
79	..	7	..	6	1	10	..	4
80	1	9	..	16	2	13	2	18
81	4	18	..	8	2	15	1	..
82	..	1	..	..	1	1	..	..
	7	44	2	33	7	45	4	32

Here in each period there are a few burials on the right side, but the regular rule is burial on the left. There is no tendency to change from one side to the other; but on the whole the males have more exceptions from the left position than the females.

The whole conclusion must be that *only about 1 in 9 was buried on the right side*; that *there was no progressive change in direction* at Tarkhan, though there is a slight change from north to south at Turah; and that the south being nearly twice as usual as the north was due to a preponderance in the male burials only.

9. The next question is the size of the graves,

which gives a general indication of the resources of the people. The median size is at

S.D.	Tarkhan.	Turah.
77	35 × 69	
78	41 × 70	33 × 44
79	40 × 70	38 × 60
80	40 × 63	35 × 58
81	36 × 61	40? × 88?
82	28 × 53	

The last entry in each column is of only four or five examples, too few to give a true average. At Tarkhan there is a slight rise to 78, and then a steady decline; at Turah the maximum is at 79. This is reasonable as it implies that at Tarkhan a decline set in under Mena, owing to the foundation of Memphis, which drew away the richer people; while Turah opposite Memphis was richest during the first century of the new capital.

10. The proportion of male to female burials noted shows curious variations. It can only be stated for Tarkhan, as there are no general records of sex at Turah—

S.D.	Male.	Female.
77	3	3
78	10	2
79	7	7
80	10	16
81	25	9

The fluctuation shows no consistency, and we could hardly draw any conclusion from it. Possibly as 80 was the richest and most luxurious age (Zet and Den), so female burials then received more attention. It must be remembered that we are only dealing with the burials which had enough offerings in them to yield a date; the actual number of bodies interred may have been equally male and female, but we can only note here what we can date by the presence of a variety of offerings.

11. Burials were frequently without coffins, and, in other instances, the coffins had often been destroyed or decayed, so there are not nearly so many coffins to note as the number of burials dealt with above. The types of coffin recorded are as follows—

S.D.	Wood coffin.	Tray.	Basket.	Pottery.
77	11	..	1	
78	17	2	..	
79	8	5	3	
80	12	9	5	
81	19	7	6	3
82	1	..	1	

The proportions between these show that the tray with shallow sides was coming more into use, and also the basket, during the first dynasty. As to the earliest use of the basket, the reed-case must be dated to 77 or 78 by the pottery found with it; but the baskets of 79 are not in closely dated graves, and it would be quite as likely that they might be of S.D. 80, so the basket coffin cannot be safely fixed before that.

The comparative poverty of Turah is seen not only in the smaller size of the graves in each period, but in the scarcity of wood coffins.

S.D.	Mud.	Wood.	Pot.
78	13	1	1
79	..	1	..
80	..	4	1

Before the founding of Memphis they are nearly all of mere mud; but by the middle of the first dynasty some wood was occasionally used.

Not only was the tray growing in favour, but the coffin was being diminished in height, assimilating it to the tray. The average height of the coffin was—

S.D.	Inches.
77	24
78	20
79	16
80	13
81	14

The whole coffin also diminished in size, the median sizes being—

S.D.	Inches.
77	51 × 23
78	52 × 25
79	45 × 20
80	52 × 23
81	39 × 20

The diminution was checked in 80 because the trays came more into use, which needed less wood, and would not hold the body in so well as a coffin; but even the use of the tray did not check the diminution in the last period.

12. Looking at the funeral furniture, we see that the burial of beds was increasing up to the age of luxury in S.D. 80. The numbers are—

S.D. 77	1 bed
78	1
79	6
80	10
81	9
82	1

The use of copper tools seems more general earlier; but as they would be among the main objects to be robbed from the graves, these numbers may be affected by the part of the grave in which they were placed.

S.D. 77	3 tools
78	6
79	1
80	1
81	2
82	0

Summary

13. From these various classes of remains, which are so numerous that they can give statistical results, we can now draw some conclusions.

In general, there was no progressive change in the direction of burial, head to north or to south, but the excess to the south were males. There was no change in the attitude, all were contracted; and the same proportion, of about 1 on the right side to 8 on the left, continued throughout.

Two periods of *maxima* may be seen. In S.D. 78, the age of Narmer (Mena) and his immediate predecessors, the sizes of the graves and of the coffins were greatest, and diminished as time went on. Copper tools were then more often buried. We may call this the maximum application of labour and reality.

In S.D. 80, about the time of queen Merneit, the number of wealthy female graves, and the number of burials of beds, were greatest. We may call this the maximum of luxury.

The decline at Tarkhan was probably hastened by the rise of Memphis under Mena; while Turah, though much poorer, yet benefited by the political change.

CHAPTER III

THE CONTENTS OF THE GRAVES

14. In giving account of so large a cemetery it is desirable to publish a compact register of the groups of objects found. To describe every grave separately in detail means a callous disregard of students and readers, as such a mass of undigested material cannot be used without a long process of tabulating. That tabulating is best done once for all by those who know the material, and done at once while the details are remembered. Such a tabulation compels a proper mode of registering the pottery and stone forms. It is a mere waste of the material to rely on small scattered sketches which are not co-ordinated, and which have no connection; the details of form cannot be seen safely in small figures, and the whole business of comparative treatment and connection of forms is shirked by the observer and thrown upon the reader. It is useless to expect the reader to wade through the connection of hundreds of small drawings repeating the same forms many times; and such a shape of publication would be the virtual death of the material.

The only permanent system of registration is by having a full *corpus* of all the forms arranged and numbered; and then to record every type of pottery and stone by the *corpus* numbers. Such a system was started in publishing the first known great prehistoric cemetery, that of Naqadeh. It has been carried on in the publications of *El Amrah*, *Diospolis Parva*, *the Predynastic Cemetery of El Mahasna*, *the Labyrinth and Gerzeh*, etc. To that prehistoric *corpus* we need now to add a *corpus* of the early historic age here, in order to deal with the new material.

A movement in this direction has been made in the useful publication by Dr. Junker of his work at Turah, and it might seem a pity to relay such a foundation. Unfortunately his *corpus* only includes a third of the required forms, its order is not in uniform progression (from the most open to the most closed types), and the photographs are not to any uniform scale, and are indistinct in parts so that the forms are uncertain. It seems needful therefore, in view of future work, to lay out a uniform and full *corpus* of drawings.

The register of Dr. Junker is so valuable for comparison with our results, that it is here extracted, with the numbers all converted to the *corpus* numbers here used, both for pottery and stone. Of course neither in our own results, nor in his, is it of any use to publish records which mean nothing; a single common pot in a grave is valueless as a record, or even two very common contemporary forms if repeatedly stated; only groups are of use which serve to connect the historical range of the forms, or to connect them with other objects found in the same grave. Useless records are a great evil; if published they waste the time of every student and obscure the other records with which they are mixed. When the material in a group is insufficient to give any effective result, it is only a detriment to encumber publication by such useless records. In no science is the result of every inconclusive experiment published, but only those which can have some result.

The form of register here adopted shows all the matters which are wanted for comparative reference. The explanation of each column is given at the base of the first page, pl. lx. The fullest columns are put to the left, so that the lines can be traced most easily. By classing the pottery and stone types approximately in columns, it is easy to run through all the eight sheets of registers in less than a minute, in order to note every occurrence of any particular type. The sequence date given with each form of the *corpus* will show more closely how far the register need be consulted.

On pl. lxvii are the more important of the groups of the Naga ed Deir Cemetery, which correspond in date to the present work. These are recorded here from Dr. Reisner's publication, so far as the skew views of the photographs enable the types to be distinguished; many vases cannot be typed at all, especially the bowls. It is much to be hoped that adequate drawings, on the standard scale of one-sixth, will be published of all these large and important groups, so far as the *corpus* here will not suffice for their registration.

15. We now proceed to supplement the registered details by a description of the exceptional objects and details of the graves of Tarkhan, in the same order as the register. It may be taken as a general statement that every burial on this register was contracted, with the knees sharply bent, the thighs bent square to the body or more acutely, the elbows bent at right angles or more acutely, and the hands usually before the face. The graves marked L were lined with brickwork, with a decided batter, smoothly plastered with mud, but not whitewashed. Otherwise the graves were merely cut in the gravel roughly, square or oval, marked S and O. The roofing, if traceable, was of sticks laid across, to support matting now perished. Probably most of the graves were not roofed at all; in no case was any arching or corbelling seen, though the sides were often not at all weathered down. Only three stairways were found, described under Burials; and only twice were there separate chambers for the offerings, in grave 158 (pl. ii) and mastaba 1060 (pl. xviii). As most of the graves had been plundered, the body was usually broken up or missing altogether; and though the soil was preservative of woody fibre, the bones were usually fragile. The general scattering of the pottery prevents its position being of importance in most cases.

16. SEQUENCE DATE 77. Grave 81. Body perfect, but probably robbed, as broken bits of alabaster vase were scattered near the face. Circular slate before arms (xxix, 9); 2 shell armlets on left forearm; bag of malachite and galena between right hand and face. Beads on left forearm and wrist, and right wrist, see section on Beads.

Grave 86. Ivory spoon (xii, 2; xiii, 13), slate dish, two alabaster vases, together inside coffin in front of feet. Pottery 46*f* in front of coffin head, 54*s* behind coffin (see xiv, 50; xxix, 10).

Grave 104. Turtle palette (i, 11; xxix, 8) on top of a cylinder jar 46*f*; nothing else left in grave.

Grave 141. Pottery all inside coffin except two 46*p* at back of coffin.

Grave 144. Along front, east, of coffin, three carved legs and one beam of bed, 70 × 32, other beam outside of feet. Wooden tray and dipper (xi, 25, 27; xii, 8, 9), along front of coffin.

Grave 315. Body gone. Bull's horn in middle, gazelle skull in corner. Wave-pattern slate jar, i, 4; cylinder with name of king KA (?) (xxxi, 66,) see 78, grave 261.

Grave 466. Rectangular basket coffin of rushes; only one pot, 60*d*, may be of this age or later. Head S, face E.

Grave 527. Wooden table board, much like xi, 23, but with two ridges across it instead of feet. All nine jars contained ash. No body.

Grave 804. Twenty cylinder jars, all containing mud.

Grave 1006. Finely built walls with batter, coated with an inch of plaster with straw. Lined round with matting. Bricks 9·2 × 4·5 × 2·7 all laid stretchers, courses breaking joint.

Grave 1015. Copper adzes and chisel behind head (v, 26–8; vi, 7–9).

Grave 1037. Sloping sides plastered, but no brick-work. Lined with reed mat. Flint knife (vii, 5).

Grave 1051. Five hardwood arrow-heads (ix, 14–18; x, 7), dated by one pot 46*f*, nothing else in grave.

Grave 1062. Long spoon (ivory ?), remains of slate palette of double bird type.

Grave 1063. Fish palette (i, 9; xxix, 28) dated by cylinder jars 46 *d*, *f*, *k*.

17. SEQUENCE DATE 78. Grave 7. Plaster still soft when pottery was put in. Pole roof covered with matting. Two-stroke mark on several cylinder jars. Copper axe (vi, 6) outside south end of coffin, close to wall. Fifteen cylinder jars on east of coffin, big jars on north of coffin.

Grave 8. Body closely contracted in a square case made of matting. Three cylinders and big jar west of case, one cylinder to south.

Grave 9. Wood coffin remains with mat lining. Wood ·7 thick, cross bars below.

Grave 16. Copper bowl (vii, 14) at south end of grave behind stacks of pottery. Twenty-eight cylinder jars. Square slate at S.W. corner, (xxix, 4).

Grave 20. Large and well made, mud plastered, with flat ledge around. Remains of wood coffin, and wooden dagger lying on ledge at east (i, 1 ; xi, 20). Bull's horn on ledge at west. On several jars the fore-part or hind-part of a zebra, exquisitely drawn in ink, see iii, 6, in which these drawings are enlarged one-eighth.

Grave 27. The scarab case (iii, 4 ; xiv, 19)$_a$ was found loose in the coffin ; the pottery was outside the coffin at the north end. No trace of body.

Grave 37. Bit of a thin adze (iv, 12) outside coffin at north end. Bones of calf and birds outside at south end. Pottery along west side.

Grave 39. An adult, head S. face E, and a child before it, head S. face W., both contracted. A copper rod near the south end, calf's leg-bones at N.E. corner.

Grave 42. See pl. xxiii. Brick-lined, bricks 9 × 4½ × 3. Mud-plastered ; lined with matting while soft ; beam 6 inches thick, from end to end, to support roofing. Large jars at south, in rope-nets, full of scented fat. Lid of coffin thrown off on west. Bones of calf on west. A few small green beads. Skull and vertebrae loose outside coffin. Two alabaster dishes, not in register.

Grave 43. A beam from end to end of grave, for roofing. Ends broken out of coffin.

Grave 197. Rare jars 95 *m p*, one on each side of head, four cylinder jars full of ashes, at head end, one at feet. Malachite under the arms.

Grave 260. Limestone dish 17 *k*, alabaster vase 71 *v*, slate xxix, 7, all in front of body in coffin. Pottery outside coffin at S.W., 59 *p* at N.E., 60 *d* at S.E.

Grave 261. This is an important dated grave (see xxi) having the name of king KA of dynasty o on one of the jars (i, 6 ; xxxi, 67). An alabaster vase, 70 *d*, has traces of an erased inscription on it which might possibly be of the same king. A few beads (xiv, 51) were found loose. There was no trace of body or coffin. The grave 315, classed under 77, appears also to bear the name of KA on a jar ; and though the pottery would make 77 a rather more likely date, yet it is quite possible that it is really of 78 as grave 261.

Grave 412. This was a fine grave containing the name Tahuti-mer (xxxi, 71), shown in two views (xxi), one from each end. The views are placed side by side, with some jars marked A,B,C, so that the connection of the views can be traced. The pit is cut in gravel, mud-plastered, 125 × 61 inches, and the wall 60 inches deep ; around it is a flat ledge 32 inches below the ground, 16 wide on W., 18 on N., 22 on E., and 21 on S. There were parts of the thighs and the pelvis still in position, without any trace of coffin, scarcely sufficient to indicate the direction of the body. An adze (v, 29 ; vi, 15) and a copper bowl (vii, 15) were found to the N.E. of the place of the body. As the grave was close to 414 it was doubtless of the age of king Nar-mer-tha.

Grave 414. This grave was one of the largest, and the most important historically as it contained the large jar of king Nar-mer (xxxi, 68), and the sealings with his name and the variant Nar-mer-tha (ii, 1–4). The view of the confused pile of pottery is given in xxi. The pit was cut in the gravel, brick-lined and mud-plastered ; bricks laid as stretchers, roughly ; the plaster mixed with a little straw. Pit 140 × 66½, depth of wall 71, the ledge around it 19 on N., 21 E., 17½ S., 24 W. See the grave 415 under S.D. 80.

Grave 901 had a square basket of reed for a coffin : well dated by pottery 48 *s* and 49 *d*, and there was also 60 *d*. Head N. and face E.

Grave 1023. The ivory spoon (xii, 6 ; xiii, 1-6), model copper tools (v, 16–24), and broken alabaster vases, were all loose in the earth filling, as left by the plunderers. Twenty cylinder jars about the S. end, with a row of larger jars along the S.

18. SEQUENCE DATE 79. Grave 3. Roofing poles complete, see xxiii. Coffin 32 × 25 head N., face E. Female, in clothing. Lid not fitting coffin, but made of two boards tied together, 40 inches long. A piece of old house-timber (ix, 4) was used in making the coffin, 3 pots, 60 *b*, outside coffin on N., and one on S. This does not define the date between 77 and 81.

Grave 54. A well-preserved bedstead stood in the grave, with the contracted body lying across it, the hips and shins upon one side-pole, and the feet out beyond the bed. There was no trace of disturbance of the body, which was quite intact with the knees drawn high up and the hands before the face Probably the body had been bundled in cloth, which

has since become decayed, and the bundle was laid carelessly across the bed. A round slate (xxix, 17) was broken in two, half under the head, half behind the head; this was probably done, therefore, before burial. The form of the bed-frame is shown by the corner (viii, 3). A basket stood on the bed-pole behind the pelvis. The jars contained ashes. On them were two pot-marks (xxxi, 84, 110).

Grave 175 was cleared by Mr. Engelbach, and he describes it as follows: The grave contained two coffins side by side. The coffin on the left was of the common early ist dynasty form, its dimensions being 53 × 18 inches and 15 inches deep. The sides of the coffin were of one plank each, but the ends were of two planks one above the other (which is the more usual type). Two pieces of wood, notched at each end and shaped somewhat like yokes, were placed upright, one against each side of the coffin. Their ends were buried a few inches below the level of the bottom of the coffin. It is not certain what their use was, but it may have been that the coffin was rather weak, so that these were placed outside to keep the sides tightly together so that the ends could not fall out. The body was wrapped in a large quantity of cloth which was very much stained, and there appears to have been matting above and below it. The body was laid on its back and at full length except that the tibiae were bent up under the femora so that the feet were nearly under the hips. This position is unusual, but has been observed before at Tarkhan.

The other coffin was hollowed out of a single piece of wood, and was 43½ × 11¼ inches and 10½ inches deep, externally (see pl. xxiv). The thickness of the wood was about ⅜ inch at the sides and 1½ inches at the ends, and the wood was considerably warped. Underneath the coffin there were two cross-pieces 11¼ × 1¾ × 1¼ inches pegged on to make a stand for it. The cover of the coffin had a small boss at one end projecting about 2 inches with a width of 1½ inches which was meant for a handle, and there were a pair of holes at each end of the coffin so that the lid could be tied down by passing a string through the holes and over the handles.

The board for the cover was originally not wide enough to go on the coffin, so two strips of wood were pegged on by tenons at either side so as to give the necessary width, the whole being reinforced by two cross-pieces which were fixed on by the usual cross strips. This coffin was probably a clothes-box. The body within it was that of a young adult of about 23 years and was placed in the coffin in a dismembered condition, as no bones at all were in their correct places. This is proved from the fact that it is physically impossible to get an adult body into a box of the dimensions given. A likely explanation is that the man was found dead with most of the flesh decomposed and that the bones were buried by his relations. The bones could not have been sunbleached before burial, as the cloth, which appears to have been placed at the bottom of the coffin, was considerably stained. Both the bodies were of the male sex.

Five pots were found with these coffins; four of the type 59 *b* at the south of them and one of the type 65 *w*, in the large coffin, placed near the knees.

Around the large coffin, with one side resting on the small coffin, were the remains of a large bed 75 inches long. The breadth is not known, as the end-poles are badly broken. The bed is of the type described in pl. ix.

In the S.W. corner of the grave were three large wooden bulls'-legs, 9 inches high, the muscles being raised and the work being very good. The whole tomb-group is now in the Manchester Museum.

Grave 203. Box-coffin cut out of a single block for its sides and bottom (xxiv): the ends were each made of two boards and inserted with halving joint, and at each end a ridge was left on the bottom, to serve for feet.

Grave 278. Woman with four armlets on left forearm; proximal, ivory, slate, slate, horn in two pieces (ii, 13, 16), distal. Beads round neck.

Grave 279. On forearm, horn armlet with copper threading (as ii, 12) and ivory armlet (ii, 6).

Grave 474. The copper spear-head (i, 12; iv, 6) was lying close to the S. end of the grave, and near it the ivory spoon (xiii, 10). Pottery lay by it and at the N. end. Calves' jaw-bones on W. side. There is no trace of later objects mixed in this grave; and the position of the spear-head, close along the end wall, is just where copper implements were found in other graves, and where it is least likely to be left by any plunderer. Hence we must accept the early date of this, although no other such copper spears are known then; it is like the perfectly certain evidence for the prehistoric copper dagger at Naqadeh, and these show how scanty our knowledge is of the weapons which were nearly always robbed from these graves. The pottery dating is not very exact, but more likely to be earlier than later.

19. SEQUENCE DATE 80. Grave 60. The body was destroyed, but had lain on a wooden tray, jointed

in a remarkable manner; see ix, 20. With it were an ivory cylinder jar, 53 *g*, and hair-pin; 3 flint armlets, and 2 slate armlets.

Grave 80. An undisturbed burial with 6 stone vases in a basket, placed upon another basket with 4 vases, close south of the pelvis. A string of serpentine, garnet, carnelian, and other beads. Basalt bowl outside of the baskets.

Grave 137 contained a basket with lid, of egg-cup shape, like Junker's *Sondertyp* 3 in pottery.

Grave 149. Eight flint armlets, four on each arm. Poles and boards over the top covered with matting.

Grave 170. In one coffin two bodies, faces N., heads E. and W.; very prognathous, light-brown hair; see xxii. Skulls and bodies in position, but legs and arms shifted. Copper adze, iv, 5, in front of one body.

Grave 195. Lined with bricks, bonded English bond, nearly 10 × 5 × 3.

Grave 204. Body on tray of reeds, bordered with four branches of wood. Roofing of branches of wood, with a thick layer of reeds.

Grave 230. Undisturbed burial, coffin much decayed. Pottery all round coffin, but double row at N. end.

Grave 415. Roofing of large branches covered with matting. Wooden coffin badly decayed, mat on bottom. Upon the coffin a three-legged stool upside down. In the coffin were two alabaster jars before and behind the head; a slate palette (xxix, 21) before the hands; a cylinder jar with inscription (xxxi, 69), apparently of Nar-mer, behind the back, and three other cylinders at the foot end, containing ashes. Around the neck were strings of amethyst and carnelian beads, the largest in the cemetery (xiv, 53). As to the date of this grave, the cylinder jars, 48 *l*, 49 *l*, would point to S.D. 78, the smooth type, 50, would rather point to S.D. 80, but it was found also in the Nar-mer grave of S.D. 78. Of the stone vases, 14 is indecisive, but 61 and 72 are entirely of S.D. 80 and 81. Thus the evidence of the vases would be mainly for the later date of 80, but the inscription strongly suggests S.D. 78.

Grave 422. Ivory armlet (ii, 6) on forearm.

Grave 538. A bed-frame was placed on the top of the box coffin. A sheep's head lay N. of the coffin end.

Grave 1013. Two alabaster vases in front of arms, 3 pots at feet.

Grave 1060. The great mastaba is fully described in chap. iv. by Mr. Wainwright, who excavated it.

20. SEQUENCE DATE 81. Grave 61. Undisturbed burial upon a bed-frame. Pottery all within the frame. Alabaster 72 *g* behind the head, 14 *b* farther back on corner of frame. Baskets beyond feet. Pottery all behind the body.

Grave 88. An example of close packing of a body in a basket coffin. The femur was 17½ inches long, humerus 12·7 (445 and 324 mm.), a full average size for a man; yet the body was entirely packed into a rounded bundle 27 × 15 inches, put into a basket of 34 × 20 inches. Two alabaster vases, 78 *l*, were in the basket, one beyond the head, the other behind the pelvis.

Grave 89. A complete burial in box coffin 28 inches long. Pottery beyond head and along back of coffin, outside. Limestone dish 12 *d* at the back, and behind pelvis 2 saucers 7 *b*, one inverted on the other; in the lower were pieces of charcoal, and smoke on the upper. This is the earliest example of fire-offering known. Similar bowls of charcoal were found in xith dynasty graves. The teeth were peculiar; though the body was adult (femur 17·8 inches, trunk 30 long), and the wisdom teeth were fully grown, yet the canines were not forward.

Grave 101. A large grave with beam from end to end for roofing. At N. end 37 jars of 59 *h*, sealed with mud, and containing scented fat. Alabaster jars to the N.W., and along E. side with cylinder jars.

Grave 107. Tray formed of poles laid lengthways and across, and matting over them.

Grave 120. Originally covered in with poles and matting. No body; outside one end of coffin a basket and 5 pots, one of 60 *b* type containing a large number of the black desert beetle.

Grave 122. Copper axe, adze, and chisel (iv, 4, 14; v, 25; vi, 3–5) inside N. end of coffin. Bones dragged out, lying E. of coffin with black basalt cylinder jar 60 *f*.

Grave 136. The wooden table and sandal tray (xi, 23, 24; xii, 7, 10) were lying on edge against the western side of the coffin. Twelve pots stood round the north and north-east of the coffin.

Grave 158. This was the only example with offering-chambers, separate, beside the great mastaba 1060. It was cleared by Mr. Engelbach, who describes it as follows:

The tomb had been robbed anciently. The middle chamber, which originally must have been the burial-chamber, was absolutely bare, with the exception of a plain, rectangular slate palette which was fixed in the plaster on the wall at A, pl. ii, no. 21.

The top of the walls of the chambers lay about 40 inches below the surface of the desert. The chambers B and C contained many pots which had been anciently broken. At the S. end of the grave the chambers seem not to have been touched, perhaps because the robbers, having taken any valuables which may have been on the body, broke open the N. chambers, and, observing nothing but pots, assumed that the S. chambers were similarly filled, which proved to be the case.

The chambers D and E were covered with planks laid across the grave about 20 inches and 1½ inch thick. These planks had mortise-holes along their edges, and were probably house-timbers; they are described with plate ix.

The grave appears to have been built as follows: A hole was dug in the desert about 180 × 70 inches, and 100 inches deep, and a chamber, 70 × 40 inches, internal measurement, built centrally in it, the walls being 1½ bricks thick (*i.e.* about 14 inches); the spaces which were left at the north and the south were then divided by walls one brick thick (that is, about 9¾ inches), which abut on to the main walls. These end chambers were then widened by 5 inches on each side.

The parts F and G are really untouched desert which we removed in digging out the grave.

The inner face of the middle chamber had been plastered with mud, but only the slate palette was left in it.

The chambers contained the following objects:

Chamber B. Pottery, 6 of type 59 *b*, 16 of 59 *p*; 5 of 81 *c*. All bore traces of mud sealing, and most of them contained scented fat.

Chamber C. 3 pots of 59 *k*; 10 basket-work mats, which appear to have been stands for pots.

Chamber D. 4 large jars full of ashes, 76 *l*, marks xxxi, 83, 131; 7 of 59 *k*, marks xxxi, 166–8; 2 of 59 *f*; 2 of 59 *m*; 1 sandal-tray (vii, 6; xii, 11). Flint knife with handle; right-handed (xi, 26; xii, 1).

Chamber E. 4 dishes of 11 *b*; 2 pots with scented fat, 81 *c*; 3 pots of 33 *k*; 1 dish. Bones of an antelope.

Grave 169. In the floor of the large chamber, N. 90 × 160 × 37 deep, there were two lesser chambers N. 35 × 52 and N. 42 × 36, both 43 deep, separated by a brick wall 6 inches thick. All of the chambers were brick-lined. The lesser chamber was full of two layers of pots, 25 in all; the larger chamber also contained some pots, but was robbed of the body and valuables. On the side of the chamber was a slate palette stuck in the mud plaster, as in grave 158. The pottery had been put in the chamber while the plaster was soft.

Grave 213. A wooden coffin of the usual kind, with a double row of jars along each side of it. At the end stood a clothes-box containing a small circular slate palette, and the wooden box iii, 2; xi, 22. The lid of the box was pegged on, but on opening it nothing was found inside except the ivory comb (ii, 11; iii, 2) inscribed *ka da*, probably the owner's name. The case seems as if intended to hold a large SA amulet. One of the slate bowls from here is shown in i, 7. The roofing was of two beams of wood from end to end of grave, supporting seven branches laid across the grave.

Grave 231. Wooden coffin. Alabaster cylinder jar before feet, another behind back. In corner behind head, a dish, and in it the inscribed bowl, 24 *t*, iii, 1, with the figure of Ptah in his shrine and his name above. This is probably the earliest figure of a god known, excepting the Koptos colossi of Min. The age of it is therefore important; the dates of the allied pottery are S.D. 79–81, 80–81, 77–81; the dates of the stone vases are in five instances, where known elsewhere, all of S.D. 81. It might be questioned if the S.D. 81 types were not more widely spread over later periods; but, on looking at Abydos, such pottery goes to S.D. 79, and there is no trace of such pottery at Beyt Khallaf in the beginning of the iiird dynasty, nor at Abydos in the iind dynasty. It seems, therefore, certain that this figure of Ptah must be as early as about the reign of Den, ist dynasty.

Grave 269. Arms extended in front, slightly bent, perhaps pulled out by plunderers. Only one horn armlet (ii, 12; vi, 14) left on arm, others scattered in grave, 4 of slate, 1 of ivory (Mackay); see limestone and shell armlets, ii, 7, 8. Beads scattered in front of legs, (xiv, 60–1).

Grave 1016. This may be quoted as a complete example of the later graves of the 1000 cemetery. The pit is square, 59 × 38, just large enough for a closely contracted body; an alabaster bowl and jars in front of head and knees, three alabasters beyond pelvis, and six pottery jars and bowl beyond feet. The contents of three alabasters and 2 pots are mud, four pots near the feet in the N.W. corner contain ashes of halfa-grass with chips of pottery, and the rest of the vessels are empty. The sides of the grave were lined with mats; under the body lay some

remains of a wooden tray ; the roof was constructed of poles covered with matting, and a mud coating was placed over all.

Grave 1018, like many others, was cut wider in the loose gravel at the surface, and then narrowed in the soft limestone. On the ledge at the side was straw plaiting covered with mud, probably part of a mat spread over the whole roofing ; 1020 had a reed mat on the ledge.

Grave 1034. An interesting example of a multiple burial, see xxii. In the S.W. corner were two contracted skeletons similarly placed, head S, face E, one before the other. Before them, in the S.E. corner, was an oval pottery coffin with a child placed head N. face E. In the N.W. corner were 17 jars in rows, and 3 bowls. On the west of the jars and feet of the adults, were alabaster vases. The pottery jars had the three-stroke mark, like xxxi, 176-8, and a mark like xxxi, 110.

21. UNDATED GRAVES. Grave 17. Adze and flaying-knife (iv, 2 ; v, 15) lay close to south end of grave. Three gaming-rods of ivory (like xiv, 29) and a flint plate (vii, 12) were loose in the filling. No body or pottery left.

Grave 22. Two flaying-knives (iv, 1, 7) and tip of a bow (vii, 1) lay close to the N. end of the grave. The various deposits of copper at the ends of the grave had doubtless been overlooked by the plunderers anciently, and needed a very thorough search to find them. Beads (xiv, 55) loose. No body or pottery.

Grave 96 is an example of close packing. A square basket coffin 28 × 14 fitted into the grave. In it, in a space 26 × 12, was a woman's skeleton with plaits of braided hair, skull 5 inches high, spine 26, leg-bones 15 and 15, total 61 inches high.

Grave 1004. A basket burial, see pl. xxvi. It was placed in a recess, bricked across the mouth. The bricks varied from 9 to 10 inches × 4½ to 5¼ × 3. The recess was 56 long inwards, 40 wide, door 25 wide ; pit leading to it 50 wide tapering to 16, and 30 long. There were no pottery or stone vases by which to date it ; by the head-rest it probably belongs to the iiird dynasty. The head-rest was found in fragments in the pit, outside of the chamber. The basket and body were carried intact to the Cairo Museum.

Grave 1007. The skeleton had been entirely taken to pieces ; see xxii. Not even the finger and toe bones were left together. There were no vases by which to date it.

CHAPTER IV

THE GREAT MASTABA 1060 OF SENAR

By GERALD WAINWRIGHT, B.A.

22. IN the last three weeks of the work at Kafr Tarkhan, I found the large mastaba, no. 1060. Its position is curiously isolated, being far to the south of the main cemetery of contemporary date, and quite separate from the nearest graves of this date, which were on a different mound, lying much nearer the cultivation. It is built of crude brick, and much of it is in splendid preservation, showing remarkably fine and accurate work, though done in so rough a material. Unfortunately the north and south ends are hopelessly weathered away, and do not provide any clue as to the exact length, for in each case the brickwork and also the plaster pavement, which seems to have surrounded the whole, has been reduced to a layer of black dust tapering in thickness to an inch or less. It was therefore impossible to discover how many recesses there originally were on the faces, and so to complete the plan. It is evident, however, that there was not a recess opposite to the chamber, which would have served for the performance of rites ; probably the number was even, as occurs in the ist and iiird dynasty mastabas at Gizeh (*Gizeh and Rifeh*, pls. vi, vii). Some pre-eminence was evidently assigned to a recess which is apparently just to the south of the centre of the mastaba, for while both on the east and west sides, in the recesses which were sufficiently well-preserved, the central panel shows traces of red paint, yet this one alone presents no traces whatever ; possibly a wooden panel stood here. Moreover this recess was floored with wood, which flooring was raised a few inches above the footing, as will be seen in the photograph pl. xv, 1, where it is marked by the arrow, and in the plan pl. xviii. A photograph of this floor is shown, pl. xv, 2. The wood consisted of five planks, the outer of which was 7 × 11 × 72 inches in length, and ran in under the walls of the building. The mastaba was covered all over with a coating of white-painted mud plaster, and was set upon a footing of crude brick 15 inches wide and 7 high. Outside of this was a broad pavement of mud plaster at least 100 inches wide, though no definite edge could be delimited owing to extreme weathering. Upon this stood the fender wall. There was no perceptible batter on the faces of the mastaba, which still remain to a height of 27 inches, leaving little more than a passage between the fender wall and the building. The east face of this wall had a

batter of 5 in 16. There were two sizes of bricks used in the construction. They were on the average 9·1 × 4·2 × 2·7 (variations 8·7 to 9·5, × 4·0 to 4·5, × 2·5 to 3) used for the general building; and the smaller size 5·9 × 2·7 × 2·8 (variations 5·7 to 6·0, × 2·5 to 3, × 2·5 to 3·0) used only for the pilasters.

These pilasters were bonded into the main building. The construction of the walls varied somewhat. Thus the east wall was built of courses of headers and stretchers in the following order:—*h, h, h, s, h, h, h, h, h, s, h, s, h, s;* and the west wall *h, s, h, s, h, h, h.*

All the cross-walls observed were built in regularly recurring courses of one of headers and one of stretchers.

The foundations of the mastaba were of the slightest, a smooth place having been levelled in the clean gravel a little below the desert surface, and directly on this were laid the courses of bricks. At intervals in the brickwork of the walls there was laid a bonding course of reeds and twigs (pl. xvi, 3). Against the inner faces of the east and west masses of brickwork were set a series of small buttresses.

Although we tried the ground most carefully on all four sides of the mastaba, we found no surrounding graves as at Gizeh.

23. The plan of construction, pl. xviii, was simple, and closely resembles that of the ist dynasty mastabas both at Gizeh (*Gizeh and Rifeh*, pl. vi) and at Naqadeh (de Morgan, *Recherches sur les Origines*, fig. 518) and the small graves of this date at Naga-ed-Dêr. (Reisner, *Early Dynastic Cemeteries of Naga-ed-Dêr*, i, pl. 76). A central set of chambers was sunk into the rock, and around these, but on the surface of the desert, a thick shell of brickwork was constructed. The interim space was then divided up by a series of cross-walls, though it can hardly be said that they tied the whole together, as they only butted against the outer wall and were not bonded in. The interior of the building was finally filled with sand. These connecting walls did not form chambers in any sense, for they did not rise right through the original body of the mastaba.

24. In the centre of the whole, the main chamber was dug down through gravel to the bed-rock, consisting of marl. At both the north and south ends of this also were dug a pair of small subsidiary chambers for the offerings. A photograph of the north pair is shown on pl. xvi, 2. As in the Gizeh mastaba, the main chamber is deeper than the offering-chambers, the first being 89 inches deep below the ledge, and the others only 69 inches. Here, however, the parallel ceases, for both at Gizeh and Naqadeh the offering chambers lie one beyond the other in each pair, but here they lie side by side, as they do in the grave 158, and also in many of the small tombs, dating to the ist dynasty, in cemetery 1500 (Reisner, *Early Dynastic Cemeteries of Naga-ed-Dêr*, i, pl. 76 and p. 139 *et seqq.*). Curiously enough, although these pairs were so small yet they were strengthened by having a tie-beam built in right across the middle of each, pl. xvi. There was another peculiarity in their construction. Sufficient space does not appear to have been left for them, and hence they run 6 inches into the wall dividing them from the main chamber, pl. xviii. This portion of the wall is carried over them on wooden beams, pl. xvi, 2.

Though there was no connection between these subsidiary chambers themselves and the main one, yet in the upper part of the wall between those, both at the north and south ends, there is a bricked-up doorway, the threshold of which is on a level with the ledge at the top of the chambers. This ledge will be seen in pl. xvi, i, as also the door, which figures in the centre of the top edge of the photograph. The bricking-up bears no signs of being later than the construction of the tomb, and the same bricks are used for this as for the building of the mastaba. It is difficult to surmise the object of these two doorways, and why they should have been bricked up; it can only be remarked that the same feature was also found in the royal tomb of Aha at Naqadeh (*Recherches*, pp. 154, 158).

Of considerable interest are the four false doors, which are shallow depressions less than $\frac{1}{2}$ inch deep, and are found in the central chamber, two being on the north wall and two on the south, pl. xvi, 1. They are painted red, like the panels in the recesses on the outside, which recalls the red recesses in the tombs of Zer and Zet (*R. T.* i, 10, ii, 8).

They appear to have been intended as doors by which the spirit of the deceased could enter his store-chambers from the place of burial, for they are as nearly as possible opposite to the centre of these chambers of offerings, and do not occur at all on the east and west sides where there are no such chambers. All the chambers of the interior were plastered and painted white, while the walls above the ledges were plastered only.

In the south division of the mastaba there was an almost shapeless pit sunk in the gravel, evidently unfinished. When the underlying rock had been reached, a narrow pit was begun which had probably been intended for the chamber. At the south side of

the pit there was an irregular cavernous extension of the excavation. The wall at the north side of this has been built with a smooth face along the edge, though for some reason it is a little thicker on the east side.

In the filling of the mastaba at C were found two pots, pl. xix, nos. 20, 21, and with them a faggot of sticks similar to those used in bonding the courses.

25. A great deal of worked limestone in large slabs had been used, whether as roofing or in some other capacity could not be decided. These stones in their present broken condition ran as large as 18 × 12 × 33 inches in length. In pl. xvi, 1 a few of them will be seen resting both on the ledge and on the floor of the chamber. They were found all through the rubbish with which the tomb was filled when it was discovered. The ledge which runs round the top of the chamber, pls. xix, 1, xvi, 1, no doubt served to carry the roof, just as it did in various of the small tombs of similar construction of the same date, which we found in this cemetery. The stones were only discovered in the central chamber, and formed a feature peculiar to it. That there had been a roof more substantial than one of mere plank and brushwood seems probable from the fact that the plunderers effected their entrance by mining down through the thick brick walls at A pl. xviii (see also the broken edge at the right-hand bottom corner, pl. xvi, 1), and this would have been an unnecessary labour had the roof been easily destructible. If these were roof-stones they would be the earliest stone used for constructional purposes yet known, as they are earlier in date than the granite floor of Den, 1st dynasty, which was followed some time later by the stone-built chamber of Kha-sekhemui in the IInd dynasty. However, from the numerous large-sized pieces of charcoal also found everywhere in the central chamber, there must have been a great quantity of woodwork used. The only vestige of this still *in situ* is the charred end of a beam still in the hole 3 inches below the level of the roof-ledge. The exact use of this beam is not quite apparent, for if the roofing were of these large blocks of stone, a small beam about 6 × 6 inches square seems inadequate for any purposes of support. Possibly the chamber may have had a wooden ceiling three inches thick below a heavy stone roof. For such a purpose the beam would have been sufficient.

26. Before leaving the subject of the construction, an examination of a series of measurements will give the length of the cubit used :

Total width .	615	÷ 30	= 20·50 *
E. wall, thick	134	6½	20·61
E. to W. wall	347	17	20·41
W. wall, thick	134	6½	20·61
Buttresses, wide	78	3¾	20·80
„ deep	21	1	21·0
Recesses, wide.	62	3	20·67
„ deep.	21	1	21
„ niche	21	1	21
Chambers :			
Central, long	186	9	20·67 *
„ wide	102	5	20·40 *
„ deep	168	8	21·00
Door, wide	29	1½	19·33
Smaller, long	81	4	20·25 *
wide	44	2	22·0 *?
Red recess, high	52	2½	20·80 *
wide	15	¾	20·0

It is obvious that these data are of very unequal value, as to their accuracy and the certainty of their intention. The mean of the best, marked with a star, is 20·77; or, omitting a very different one marked with a query, 20·44.

The variations in the above table are partly due to the comparative roughness of the material in which the mastaba is built, crude brick covered with mud plaster, which has scaled off in places. It should be remarked that the construction is very good and corresponding features are exactly alike.

27. Although the plunderers had thrown everything about, and had broken the body to pieces, the remains of a rich burial were recovered. The greater part of the tomb furniture had been thrown out into the broken hole in the wall at A; and at B (pl. xviii) were found the bones of an ox, with charcoal, and a few broken potsherds.

Besides great quantities of chips of alabaster, slate, and a few fragments of a breccia dish, there were found :—

17 cylindrical alabaster vases, either perfect or restorable. Types 53 *k*, 54 *l*, *n*, *p*, *r*, *v*, *w*, 62 *n*, *u*.

7 dishes and bowls. Types 8 *g*, 9 *h*, *r*, *y*, 21 *g*, 29 *h*, *j*.

1 small quartz bowl 2⅜ inches diameter, pl. xvi, 5.

1 unornamented oblong slate palette 5 × 3¼ inches, without a hole for suspension, xxix, 19.

3 tall ivory draughtsmen, pl. xix, 2.

1 flat dome-shaped ivory draughtsman, pl. xix, 3.

1 copper chisel, pl. xix, 4.

Remains of an adze, probably like v, 28.

Various scraps of copper.

Several score of flints. Types xix, 5, 6.

1 small globular flint, $\frac{5}{8}$ inch diameter.

1 box of crude mud, pl. xvii, 1, 2, and the remains of others.

A black ink graffito on one of the pieces of prepared stone, pl. xvi, 6.

Several thick pads of linen of various qualities.

Almost the only remains of pottery found in the central chamber were the pieces of two curious vases of un-Egyptian appearance (pls. xvi, 1, xix, 24). All the rest was stored in the four offering-chambers, in which there was nothing else besides pots. The types are drawn on pls. xix, xx, while the potmarks will be found on pl. xxx. The clay caps on the jars were mostly plain, but such as had sealings are drawn on pl. xxx.

28. We compared the various shapes of the pottery with the dated examples published in *The Royal Tombs* I, pls. xxxix to xliii, and *Abydos* I, pls. xxxvi to xli and p. 21, and the known types are found to fall clearly into reigns of the middle of the 1st dynasty; they thus serve to date the mastaba very closely. The results are here tabulated, the numbers referring to the drawings on pls. xix, xx. As nos. 8, 9, 13, 15, 21, 22, 23, 24, 28 do not occur in these dated groups, and 10 has no date, these are of no use for dating purposes; 34 being so very uneven in its shape cannot be accurately fixed to any type. The 19 dateable types group themselves as follows:—

Reigns.	Types of Pots.						Total.	Sundries.
Mena } Narmer }	14	16					2	
Aha } Zer } Zet	18	19	25	26	30	35	6	} 29
Merneit	7	11	20	31	32	36	6	} 33
Den	12						1	
Azab	17						1	
Semerkhet } Qa }	27						1	
							17	2

Here it appears that, out of a total of 19 dateable types, 13 fall between Zer and Merneit. The central point here is Zet, to which the mastaba should probably be placed, although as it happens there is no vase which is datable to his reign. This no doubt arises from the fact that we have very little material of his from which to date. Hence by the pottery only which the mastaba contained, it dates itself to the reign of Zet.

After the pottery we next turn to the stone vases, the drawings of which had been made by another hand, that of Mrs. Petrie, and which I had not used. Prof. Petrie worked out their sequence-dates, and arrived at the following results.

S.D. 79	1.
80	10.
81	3.

On referring to the comparative table of sequence-dates and kings (sect. 5) we find that S.D. 79 corresponds to Mena and Zer, and S.D. 80 corresponds to Zet; S.D. 81, which is now added to this old list, corresponds to Merneit, Den, and Azab. It is here seen that out of 13 types of stone vases 10 fall under S.D. 80, *i.e.* under Zet, to which reign the mastaba had already been assigned by the pottery.

Thus the two classes of objects are found to be in full agreement as to the date to be given to the burial, and this result is the more satisfactory in that it was arrived at independently from two independent but collateral sources, and by two people working independently of each other.

These results of dating by pottery and stone-vase shapes agree completely with the other evidences of date, as follows:—

1. General resemblance.
   - *a.* to the mastabas of the early part of dyn. i, *i.e.* Aha and Zet.
   - *b.* to the small graves of dyn. i.
2. Resemblance of the red-painted recesses to those of Zer and Zet.
3. Resemblance of the system of construction to the technique of the wooden construction found in the tombs of Zer and Zet, on which it appears to be based.
4. Resemblance of the actual construction both in this technique and material to the tomb of Merneit.
5. Actual dating by pottery to Zet.
6. Actual dating by stone vases to Zet.

Hence all the evidences that can be collected converge on the same point, which is somewhere in the first part of the ist dynasty, and of this period more particularly that part between Zer and Merneit; therefore about the reign of Zet, which lies between these two.

29. *Description of Plates.* Pl. xviii, the plan of the mastaba, which has been treated already.

Pl. xix, 1, the E. to W. section of the central chamber showing the N. wall, which will be found in photograph on pl. xvi, 1.

Nos. 2 and 3 are the ivory draughtsmen. There were three tall ones and one flat-domed one. Two of them are seen lying in the group, pl. xv, 3.

One of the copper chisels was of the thick, powerful kind with a narrow blade, xix, 4. In this specimen the edge is rather less than ·5 inch wide, and, as will be seen from the side-view, the chisel is rather thicker than it is wide. The ends of the blade splay out a little on either side. The adze, of which only a few fragments remained, had been of the thin wide type like pl. v, 28. Dr. Tuck, of Univ. Coll., London, kindly analysed samples from this chisel, with a special view to ascertaining the presence or absence of tin. Unfortunately he was too busy to undertake a full quantitative analysis, but reports the following:—

"The enclosed sample contains copper coated with basic carbonate of copper. There is a fairly large amount of silica present, doubtless in the outside layer of carbonate. There may be some tin, but only a very small trace."

This chisel then was made of copper, and, if it has been hardened in any way, tin was not the means by which it was done.

The flints all belonged to one of the two types here figured, nos. 5 and 6. They were delicately and well made for their kind.

The pottery is figured on pls. xix, xx, and little remains to be said of it. Its value for dating purposes has been treated in sect. 28, and the comparison of its types to those of other times will be made in sections 33, 34. One of the first things to strike an observer is that the separate clays, which were so distinctive of the various classes of pottery in the pre-dynastic ages, can no longer be distinguished. The various qualities are by this time merged into a single substance, which slightly resembles now one and now the other, but in every guise it is quite different to the older classes. The same may be said of the red polish. The burnishing is done carelessly, no attempt being made to obtain an even surface, but a comparatively few irregular rubs are deemed sufficient. This technique seems to confine itself to such shapes as 7 and 17. The body of 7 is not unlike the old R pottery. On the outside it has been very roughly made, merely scraped with a stick or other instrument; 15 and 16 are nicely polished, with the dullish, hard polish of the Old Kingdom pottery, and not like the bright polishing of that of the pre-dynastic ages. Nos. 25, 26, 27, 29 appear to have been painted red, and the surface has been merely smoothed down with a polisher rather than burnished. This process produces a fine, smooth, hard surface. Nos. 8, 9, 10, 11, 12, 13, 14, 18, 19, 20, 28, 34 have all been red-painted without having been polished; 21, 22, 23, 30 are all unpainted, as are 32, 33, 35, and 36. This last group was made of a pottery peculiar to itself, of a lighter colour than the other classes; it has a good hard body, but of a somewhat rough surface; 37 was of this pottery, but with some facing wash. Many of the vases now appear to have been made on the slow-wheel, for the bases of them show marks of having been cut off the original lump of clay from which they have been turned, whereas in the pre-dynastic pottery no such signs are visible. The slow-wheel, however, has not ousted the hand-made pottery, for many specimens are still made by this means, notably the large pots 25, 26, 27, 28, 29, 30, 31. The semi-circular pattern on 25 has been marked on by the finger. The bands on 26, 27, 28 are rough ridges of clay laid on the surface.

30. No. 24 is a black-painted neck and handle. A handled vase such as this is quite foreign to Egypt, and reminds one of the foreign pottery found under the staircase in the tomb of Zer (*Royal Tombs* II, p. 46, pl. liv; *Abydos* I, pl. viii). It is noteworthy that at Abydos the foreign pottery was found in the tombs of Zer, Den, and Semer-khet (Mersekha) and now it is found once more in another part of the country under the reign of Zet, between the above reigns.

With this piece in the burial-chamber was found the group of fragments figured in pl. xvi, 4. These fragments also appear to be of foreign origin. The body is composed of a thin, hard, pinkish buff clay with grey and dark red specks in it. It has been painted over with a coat of red haematite upon which widely spaced lines in a trellis pattern have been burnished, each by one stroke of the polisher. The uppermost piece shows a portion of the neck, the whole surface of which has been completely polished, without any dull places. This native ware at this period had degenerated into a form wherein the polishing lines did not touch each other, thus producing a streaky, inferior form of polishing; but there is a long distance between this and a pot which is rough surfaced with a few widely spaced polished lines laid on it in a regular trellis pattern, there being $\frac{4}{10}$ inch and more of rough surface between

lines $\frac{1}{10}$ inch wide. In respect of the probable foreign origin of these two vases, it is interesting to observe that these were almost the only scraps of pottery found in the central chamber, the other pieces being 7, 8, 13, 14, 23, and the fragment 25; all the rest of the pottery, numbering many dozens of jars, having been placed in the four store-chambers. These two were thus deposited in the burial-chamber itself along with the owner's most precious valuables, such as his stone vases, chisels of the valuable copper, and ivory draughtsmen. This argues that they and their contents were of much greater value and rarity than were the ordinary jars with their contents, and this would be quite in accord with a foreign origin. They, however, appear not to be Aegean, for Mr. Peet informs me that he knows nothing like them of Mediterranean origin, hence one is referred to Syria, whence (as shown in *The Labyrinth, Gerzeh, and Mazghuneh*, p. 20), there is reason to believe that other pottery was imported at this and earlier times.

31. Pl. xv, 1, shows the east face of the mastaba, and the raised wooden floor of the recess is discernible below the arrow; in no. 2, a view of this recess is given. No. 3 is a view of the group of vases as it was found, and nos. 4 and 5 on this plate and 3 on pl. xviii show a representative group which will give a good idea of the general workmanship. The vases are mostly distinguished by a general clumsiness and thickness of style, though some of the smaller are quite fine and delicate in workmanship. A noticeable feature is that they are entirely made of alabaster, and that the softer stone gypsum—which is so common a little later—does not appear here. Only the very tall vase, pl. xv, 4, and one of the ordinary-sized ones, pl. xvii, 3, are without a cord pattern round the neck. All the others have a raised ridge with diagonal cuts across it, making a rope pattern. They had almost all been blackened by the burning, and most of them contained what appeared to be the charred remains of the scented fat so common at this period. None of them contained the ashes so often found in the alabasters in the small graves of the same date in this cemetery; nor did any of the pottery contain ashes. Hence ashes do not appear to belong to the civilisation represented by that burial which *a priori* might be supposed to be one of the invading race of the ist dynasty. Neither were ashes found in the Gizeh mastaba, nor yet in any of the Royal Tombs at Abydos.

Many of the alabasters were considerably corroded inside, as if by long use with some slightly acid substance. On pls. xxxii to xliv the alabasters will be found in outline in the positions which their types occupy in the general series.

Pl. xvi, 1, is the view of the central chamber showing the north wall. In the right-hand bottom corner is seen the rough broken side where the plunderers broke in. The two red recesses are clearly visible, as is the hole for the beam above the right-hand one. It is the same view as that represented in the section xix, 1; xvi 2 is a view looking down into the north pair of store-chambers. At the top of the photograph is to be seen the beam carrying the end-wall, which is let into the thickness of the wall. In the middle is the log which has been built into the construction across the chambers. No. 3 shows the bonding course of sticks, which lies between the two arrows. No. 4 is the foreign pottery with the cross-line ornament. No. 5 is the quartz bowl and no. 6 is the ink graffito reading *sn ar*, no doubt the name of the owner of the tomb.

32. Pl. xvii, 1 and 2 show the mud box found in the central chamber. No. 1 shows the bottom, from which it may be gathered that the clay was moulded on a flat coiled mat. No. 2 gives the box itself, from which the near side had been broken out. Sundry other pieces of mud were found, some perhaps originally having formed the cover, but there was nothing that could be supposed to represent a human figure, such as was found in the mud boxes of the xviiith dynasty at Meydum (*Labyrinth, Gerzeh, and Mazghuneh*, pl. xvi). No. 3 shows the rest of the alabasters, which have been treated above.

Pl. xxx shows the clay sealings and the potmarks. *The Sealings* were all of the flat domed type, sometimes moulded over a saucer, and were not the high, conical type moulded over a pot of this shape. They were all of black Nile mud except no. 2, which was of a sandy yellow clay mixed with a little fibre. Four copies of 1 were found. It is evidently a private name, Neb-ka. It cannot be a royal name, as it is neither set in a *srekh*, as are the earliest names, nor yet in a cartouche, as this name appears to be in *Mahasna*, pl. xix, p. 25. It therefore can have no connection with the iiird-dynasty king of this name. The whole contents of this mastaba are together now at Cambridge.

33. It has been shown that this mastaba can be dated with considerable accuracy to the reign of Zet; that is to say, to the middle of the ist dynasty, or, in other words, to the period just after the passing of

the old pre-dynastic civilisation, and near the beginning of that civilisation which became so well known under the later dynastic Egyptians. Before leaving the subject it will be well to see whether a study of the representative group of pottery, which the mastaba presents to us, will throw any light on that phase of history.

The pottery is typical of its period, which is one of transition, for it shows affinities both with the old and with the new civilisations. In the discussion there will be need to refer to the pottery of the old pre-dynastic age, and all this will be found duly sequence-dated, for the most part in *Diospolis Parva*, with additions in *The Labyrinth, Gerzeh, and Mazghuneh*, while the *corpus* of types is in *Naqada and Ballas*, with additions in *El Amrah and Abydos*, and *The Pre-dynastic Cemetery at El Mahasna*. The pottery of the new civilisation, that of the ist dynasty, will be found in *Abydos* I, *Royal Tombs* I, and de Morgan's *Recherches sur les Origines*, ch. iv. The pottery of our mastaba will be found on pls. xix, xx, in the present volume, where thirty specimens are represented. One, however, 24, must be left out of account as it is clearly of un-Egyptian origin; 34 must also be omitted, as its shape is too irregular for a definite determination of its type. This leaves twenty-eight specimens for comparison.

The simplest way of making a comparison between the mastaba types, representative of the later dynastic Egyptian civilisation, and the types of its two predecessors, is to compare each mastaba type firstly with the pre-dynastic shapes, as being the older; and then, if no satisfactory comparison can be found, to compare the type with those of the ist dynasty. In this way, everything in the ist dynasty pottery that can be referred back to the old pre-dynastic civilisation is eliminated, and the residue which does not figure in this set of types must have been imported from elsewhere; that is, it belongs to the new dynastic source.

Tarkhan 1060. pls. xix, xx.	Earlier Naqadeh types.	Later Dynastic types.
7	...	+
8	L 28 *b*	...
9	L 29 *a*	...
10	...	*Abydos*, i, xxviii, 9
11	L 7 *d*	...
12	P 17	...
13	P 22	...
14	...	*Ab.* xxviii, 52
15	L 78 *a*	...
16	L 78 *c*	...
17	L 53 *a*	...
18	L 53 *e*	...
19	...	*Ab.* xxviii, 19
20	...	*Ab.* vii. 24
21	...	*Ab.* vii. 24
22	...	*Ab.* vii. 24
23	from W 80	
25	...	*Ab.* xxxviii, 28
26	...	*Ab.* xxxvi, 45
27	...	*Ab.* xli, 69
28	...	variant
29	...	*Ab.* xl, 13
30	...	*Ab.* xxxvi, 47
31	L 38	...
32	L 36 *b*	...
33	L 36 *b*	...
35	L 53 *a*	...
36	L 53 *a*	...
	15	13

Type 7 may be included as dynastic on the parallel of the stone dishes, as no such type is known in the prehistoric times.

The result of this comparison is that, out of 28 pots available for study, 15 are found to represent pre-dynastic shapes, while 13 represent shapes which do not occur before the ist dynasty. Thus a representative group of pottery of the early ist dynasty shows itself—and therefore the civilisation which it represents—to be a mixture of old and new ideas, drawing from two sources which can be readily separated the one from the other. It is therefore a transition stage from the old pre-dynastic civilisation to the later well known historic Egyptian.

On putting the results of this comparison into the form of percentages it is found that

54 % represents the old pre-dynastic civilisation.
46 % „ „ new dynastic „

This shows the extent to which the civilisation in this reign drew on each of its sources, and it becomes at once clear that the civilisation of the dynastic Egyptian was not an entirely new product ready-made, freshly imported into Egypt, but had already become amalgamated in the first dynasty, at which time the old native culture was the predominant partner, in the pottery-making. Dr.

Reisner has arrived at much the same general conclusion from a comparison of the two ages. (Reisner, *Early Dynastic Cemeteries of Naga-ed-Dêr*, I, p. 126 *et seqq.*).

However, these percentages do not give quite a fair comparison, for included in this collection of types are a large number of varieties, which really represent the same original idea. In order, then, to reach a true conception of the parts played by these two sources in the building up of the later historic civilisation, such vases as 12 and 13 should be counted as one, as should 15 and 16, also 20, 21, 22, and 25, 26, 27, 28, 29, 30, and 31, 32, 33, and 35, 36. If we thus expunge material which is not the result of different ideas, but of mere variation, we find that the percentage of native pre-dynastic ideas is even greater, for, of these later ideas,

62·5 % were contributed by the native civilisation.
37·5 % " " " dynastic "

34. It is here seen that in the common class of material, which serves the every-day life of the nation, the old native population is in the ascendancy; but in considering these percentages it must not be forgotten that they are deduced from pottery, which was that portion of the civilisation most in the hands of the lower strata of society, least portable by a new people, and most fixed to the soil. Hence the old ideas would tend to continue, and the new ideas would tend to show themselves less here than in other classes of objects. So while the above ratios may give a very good idea of the large amount of the older civilisation which continued in the country, yet the comparative importance of the two influences in moulding the course of the later civilisation may perhaps be better seen by observing the chief new things which are found as soon as the dynastic civilisation appears. They are also found to be those details of the later Egyptian civilisation, which have been looked upon as its distinguishing marks.

These introductions are:

1. Brick-making, which, if not entirely new, is at any rate vastly extended.
2. Mastabas.
3. Burial without ash-jars.
4. Steles.
5. Bedsteads and pillows.
6. Carpentry on a large scale, and a corresponding increase in
7. Carpenters' tools.
8. Use of copper on a large scale.
9. Sculpture in stone.
10. Writing.
11. Cylinder seals.
12. Artistic ability.
13. Game of draughts.
14. Flax.
15. The slow wheel for potters.

It is these details, and not those of the pre-dynastic culture, which have stamped what we know as the Egyptian civilisation with its peculiar features, and which have shaped its progress during the whole course of its long history. While, on the one hand, the percentages of the common class, *i.e.* pottery, show a predominance in the lowest industry of the old native race, on the other hand the arts show a corresponding predominance of the invading race. In fact, the old pre-dynastic race scarcely seems to have influenced them at all; and although the Egyptian civilisation had long been known to science, yet its pre-dynastic forerunner was never suspected, and when it was discovered its allocation presented the utmost difficulty, as no connections could be obtained between it and its historic successor.

It seems probable, therefore, that the old pre-dynastic people continued to exist as the main body of the nation—the uncultured lower classes—for the most part influenced and not influencing, but supplying the background to the new hybrid civilisation, the most salient features of which were derived from the conquerors. The arts which the pre-dynastic people had possessed quickly fell into disuse before those of the more advanced civilisation of the invaders, which would naturally become the fashionable style. However, the pre-dynastic culture did not entirely pass without leaving its mark, for it probably gave to Egypt its famous power over the hardest stones, and moreover one of the most characteristically Egyptian of arts dates back to this age—the art of glazing.

CHAPTER V

OBJECTS FOUND IN THE CEMETERY

Plates i–xiv

(*Reference numbers, top right hand. Grave numbers, bottom left. Sequence-dates, bottom right.*)

35. PLATE I. View of the cemetery of Tarkhan from near M on pl. lxix, the hill N on the right and K on the left, the hills F and J in the distance. The hills are of a soft marly limestone, split with joints

and very flaky. Over them are caps of a few feet of gravel and sand.

1. Wooden model dagger, found lying on side of grave 20, S.D. 78. (Univ. Coll. Lond.)

2. Alabaster vase, with wavy handle, grave 53, S.D. 77. Scale 1:4. (Brussels.)

3. Pilgrim bottle of xxiiird dynasty in string net with cord handle, found in large shaft tomb in middle of eastern spur, map J, pl. lxxiv, xxiiird dynasty, 1:4. (British Museum.)

4. Hard black limestone vase with wavy band around it; see the complete form in drawing 51 *c*. This is a fine example of the decorative use of the wavy handle developed. Grave 315, S.D. 77, 1:4. (Univ. Coll.)

5. Gazelle slate, grave 84, nothing else with it.

6. Cylinder jar of pottery with name of king Ka. This is closely like the inscribed cylinder found at Abydos in the tomb of king Ka, a predecessor of Mena, see *Abydos* I, iii, 27–32. It has been suggested that these merely refer to any royal *ka*, but on the contrary this inscription is only known from a single one of the royal tombs at Abydos, where it is painted on the cylinders, incised on the pottery (*Ab.* I, iii, 37–8), and engraved on a seal (*Royal Tombs* II, iii, 89). Now here it is found in a grave which cannot be royal, and so it cannot be intended for a royal *ka*; it is clearly just on the same footing as various other names, royal and private, similarly found. The reading of the other signs, *Suten ap*, and *Ha hem ne ka*, I proposed to refer to the personal name of the king, Ap, and that of his wife, Ha. Another proposed reading was that it referred to some product of the south (*res*) and water of the north (*ha*); but this is impossible, as it is never inscribed on water jars, but only on the smallest jars—the cylinders—which are filled with scented fat, or its substitute, mud or ashes. Grave 261, S.D. 78, 1:4. (Univ. Coll.)

7, 8. Two slate bowls from graves 213 and 112; S.D. 81 and 80, 1:3. (Dublin and Bristol.)

9. Slate fish palette, grave 1063, S.D. 77, 1:3.

10. Large hollowed palette, probably derived from the fish form; as nothing was found with it no date can be assigned. Grave 310, 1:3. (Univ. Coll.)

11. Turtle-shaped slate, grave 104, S.D. 77, 1:3. (Cape.)

12. Copper spear-head, grave 474, S.D. 79, 3:5. This weapon is surprising at so early a period, as none have been found until now; yet—as stated in describing the grave—the evidence for its age is unquestionable (Univ. Coll.). A similar type—though shorter for the purpose of wearing as an amulet—was found with other early amulets, an ivory comb, and a slate palette (*Naqada*, p. 15, lviii, Q. 23), which corroborates the existence of spear-heads of this age. There is much the same case in Babylonia, where only the colossal lance of the king of Kish, and the figures on the war-scene of Enneatum, serve to show how early metal weapons were developed there.

Plate II. 1. Seal-impression in mud of king Nar-mer, naming apparently an enclosed garden or plantation from which some product came (Univ. Coll., etc.). This was found with the three following seals and a large jar bearing the name of Nar-mer (xxxi, 68) in grave 414.

2. Another seal of Nar-mer much like those found at Abydos (*Royal Tombs* II, xiii, 91, 92) but with the *mer* included in the frame, and with the *tha* bird added to it (Univ. Coll., etc.). This is a new point in this name, and the various impressions have been very carefully searched to settle the reading of the sign, in which Prof. Maspero agrees. This must not be supposed to lend any colour to a supposition that Nar-mer is the king Buzau of the iind dynasty: there is not the remotest chance of the objects of Nar-mer belonging to so late a period, and there is no ground whatever for this reading. We might as well attribute an Early English church to Henry VIII. Various misreadings have been started by those who do not know the material, such as the different values proposed for the name of king Zer; these are impossible in view of the piece of his stele which was found and taken by me to the Cairo Museum, where the sign is cut in relief on a large scale. Here we have to deal with a falcon-name, *Nar*, the Qarmut, *Clarias anguillaris*, the sacred fish of Mendes, which is shown alone in the frame on the Abydos sealing. Outside of the frame on that seal is the chisel, *Mer*, which on the Tarkhan sealing is followed by the bird, *tha*, showing a name, *Mertha*. How far this is compatible with the *men* sign, accompanying the name *Nar* on sealing 93 *R.T.* II, xiii, we cannot yet say: that sign suggests, what the position of the name in the succession shows, that Nar-mertha was Mena.

3. Sealing of Nar-mer, the name alternating with what seems intended for a flowering plant.

4. Sealing found with the previous three, and therefore of the same age. It is the seal of the Fayum province; the middle object is a building or shrine (indistinct on the only impression of this

part) with the *bucranion* above it, as shown in all the historical instances of the Fayum shrine (*Labyrinth*, xxix). To the right is the sacred crocodile of the province, Sebek, upon a standard, with ostrich plumes above the back, which were at that time the mark of a divine animal (*R.T.* I, xxix, 86; xxx). At the sides are three other crocodiles, and four below, represented as swimming in the curling waves of the lake. This mode of representing water is not found elsewhere; the usual wavy line can be traced back (*R.T.* II, xix, 148; xvi, 121; xiii, 94) to plain parallel lines, but the curling waves are not shown. (Sealings to Cairo, Manchester, Univ. Coll. Lond., Brussels, New York.)

5–10. Armlets of ivory, limestone, shell and slate, usually found on the left forearm.

11. Ivory comb, found inside the *sa* case, see iii, 2. The name Ka-da seems as if it might be connected with that of the last king of the ist dynasty; if so perhaps the dating should be brought down from S.D. 81 to 82. Of the sixteen types of stone vases and pottery found with it, only two, 59*p*, 63*e*, are yet recognised as extending to 82; the large jar 75*o* seems perhaps later than 75*n*, which is of Merneit's age, and might be later than the form *R.T.* I, xl, 12 belonging to Semer-khet. So it is possible that grave 213, and some others, may be rather later than S.D. 81. (Univ. Coll.)

12–16. Horn armlets. These are not uncommon; they are always made of pieces laced together, often joined with thin strips of copper as in 12, and in vi. 14. The fact that they are never found continuous makes it more likely that they are really turtle-shell. The Nile turtle was certainly common then, as the slates are often carved in the shape of it. (Aberdeen, Ashmolean, Munich.)

17–20. Drawings of a typical early coffin, with the ends rebated in the sides. The bottom is usually of straight boards, sometimes of old house timbers; the sides are of curved boards, fitted along the joint. The joining of the boards is by thin flat dowels. The wood is plane-tree. A full description of all the varieties of jointing coffins in this and the following dynasties, by Mr. Mackay, will appear in the next volume (*Heliopolis I, and Kafr Ammar*) dealing with the later period.

21. Plan of a grave, fully described by Mr. Engelbach in the descriptions of graves.

Pl. iii, 1. Alabaster bowl with figure of Ptah in his shrine, and his name above. The date of the grave, 231, in which this was found is discussed in the description of graves. It seems unlikely that it is later than S.D. 81, the reign of Den. In any case it is probably the earliest figure of a god that is yet known. See the drawing on pl. xxxvii, grave 231, S.D. 81, 5:4. (Ashmolean.)

2. Wooden case and lid; the form shows that it was intended to hold a large *sa* amulet. There seems to have been some form of handle attached at the lower end of the lid, by the holes and fragments of ties remaining. In it was found only the ivory comb already described. See ii, 11; xi, 22. Grave 213, S.D. 81, 2:3. (Univ. Coll.)

3. Eight armlets of flint, or rather chert; found, four on each arm, in grave 149, S.D. 80, full size. (These and others to Brit. Mus., Oxford P.R., Cambridge Ethn., Dublin, Cape, Reading, Edinburgh, Bristol, Glasgow, Carlsberg.)

4. Alabaster case in the form of a scarab; see drawing xiv, 19. It is hollowed out from the lower end, and has a plug fitting into it, carefully carved with the lines of the horny plates. The case was evidently carried by tying a string to the bottom plug and passing it through the hole between the forelegs on the under-side. Thus the weight of the whole case kept it closed. A similar mode of closing is seen in the pottery horn found at Gerzeh (*Labyrinth and Gerzeh*, vii, 13, p. 23). It must have been intended to hold some object, probably a small beetle. The special interest of it lies in the proof that the scarabaeus was venerated as early as the close of the prehistoric age. The beetles hitherto found stored in jars are some of the commoner black variety found in the desert; see grave 120, S.D. 81, and *Diospolis*, p. 33, B 217; p. 47, grave 21; others are the true scarabaeus, *Diospolis*, p. 32, B 17; p. 33, B 217; pp. 33–4, B 234. These many examples prove that the scarabaeus was venerated long before the earliest carved scarabaei of Neb-ka in the iiird dynasty, and there is therefore no ground for questioning the age of those examples. Grave 27, S.D. 78, 4:3. (Cairo Museum.)

5. Carnelian beads threaded in groups of five, sewn on to linen cloth: this is the first time such beadwork has been found. Grave 36, S.D. 78; full size.

6. Figures of the fore-part or hind-part of a zebra drawn with ink on cylinder jars. The equine leg and tuft at the end of the tail identify the animal; and the stripes on the fore-quarter are therefore to be regarded as colour, and not as the ribs. Being headless, and cut in two, it seems as if the zebra had been hunted for food, as the horse was by the cave-

man of Europe. From the fore-part only being striped, and not the haunch, it is probably the quagga that is here represented, which was very common in recent times in South Africa, and may well have extended to Egypt. Grave 20, S.D. 78, 9 : 8. (Manchester, New York, Univ. Coll.)

36. Pl. iv, 1, 2, 7. Flaying knives of copper; this form is always thin and weak, rounded at the end, with a feeble handle, and sometimes a concave blade. It seems clearly adapted for removing skins which have to be carefully preserved. (Univ. Coll.)

3, 4, 5, 8. Copper chisels of the usual forms. (3 Cambridge, 4 Reading.)

6. Copper spear, already noted under i, 12. (Univ. Coll.)

9. Copper pick; a rather similar form is known from early prehistoric time for pinning hide together.

10. This may be a pick also, or possibly a pin.

11. The tip of a copper knife.

12. The end of a thin adze of copper. (Bristol.)

13. Stout axe of copper, the top straight and square, as always found before the ist dynasty. (Dublin.)

14. Copper axe approaching the type of axe of Kha-sekhemui (*Royal Tombs* II, xlv, 76). (Reading.)

Pl. v, 15. Copper adze found with no. 2 on the last plate. (Bristol.)

16–24. Set of model tools of copper, long knife, adze, chisels, and long axe.

25. Copper adze found with the chisel, fig. 4, and axe, fig. 122. (Reading.)

26, 28. Copper adzes, and, 27, narrow axe, found together. The slight stiffening ridge on the great adze is shown in the photograph, vi, 7. A slight rounding is seen on the large adze tip, and more on the lesser. (Manchester.)

29. Copper adze from grave of Tahuti-mer, beginning of ist dynasty, showing that the older square top had become quite rounded by then. (Univ. Coll.)

30. Copper armlet, the only one upon the arm; grave 250.

Pl. vi. Most of these have been already referred to in the previous account; 1 is iv, 2; 2 is v, 15; 3 is iv, 14; 4 is iv, 4; 5 is v, 25; 6 is iv, 13; 7, 8, 9 are v, 26, 27, 28; 10 is iv, 3.

11, 12, 13, are an axe with handle found in grave 509, of the xi–xiith dynasty. The handle, 11, is elaborately covered with interlacing string, actual size; 12 is the cap from the end of the handle; and 13 is the blade, 3 : 5. (Cairo Mus.)

14 is a horn or tortoiseshell armlet with copper strip binding; grave 269, actual size, S.D. 81.

15 is a copper adze from the grave of Tahuti-mer, 412, S.D. 78, 3 : 5. (Univ. Coll.)

Pl. vii. The flints were not numerous; they accord with the styles found in the south at Abydos.

1. See grave 22, undated.

2. Compare *Abydos* I, xvii, 34, S.D. 78 or 79.

4. Compare *Ab.* 116–122, S.D. 79.

5, Compare *Ab.* 42, which is from tomb M 13 of S.D. 79. (Cambridge Ethn.)

6. Compare *Ab.* xiv, knife handle and tip, of Y Merneit, S.D. 81. (Oxford P.R.)

14, 15. Copper bowls, mentioned in description of the graves. (Ashmolean, 15.)

37. Pl. viii. Mr. Engelbach has drawn and noted the bed construction, and gives the following account:

"In the cemetery of Tarkhan many of the early dynastic people were buried on their beds instead of in coffins, a few instances showing both together, the bed being laid over the coffin.

The beds vary very much in construction and workmanship, but may be classed under five general types, with every kind of gradation between them.

The webbing of the bed may vary from coarse rush matting tied round the poles to leather straps passing through well-cut strap-holes in the bedstead.

Samples of coarse rush webbing and ornamental palm-fibre matting are shown in pl. viii.

In the first type of bed-frame (see pl. viii, 4) each side consists of a rough knee-piece of wood with part of a branch at right angles to the stem, forming a side and a leg. A mortise is cut at the bend to receive the tenon of the end of the branch of another side, which is also provided with a leg; thus four similar pieces fit together, each having a mortise at the bend to receive the tenon of the next. In this type the webbing is woven round the frame.

The second type is somewhat similar; the end poles turn down into two legs, all formed from a single piece, the side-poles being straight and cut into tenons at each end. In this instance, although the workmanship is very rough, the webbing of the bed was attached to the frame by strap-holes. In two instances these beds had been put into the grave upside down, possibly as the legs had been broken prior to the burial, showing probably that an old bedstead was used. In both this and the preceding type the legs are slightly tapered and quite devoid of ornament.

The third and most common type consists of two

side-poles with the end-poles fitting into them by means of tenons, the bedstead being supported by four legs carved like the fore and hind-legs of an animal. These legs frequently have the muscles outlined by a broad line in relief. The poles may be either square, with the edges bevelled, or of circular section. These forms are shown in pl. viii, 3; and pl. ix, 8–10 gives a drawing to scale 1 : 10, of viii, 6, the largest and most perfect bedstead found in the cemetery, and shows the details of jointing, etc. The length of this bed is 69 inches, but smaller forms are found which may rather be couches than beds.

The fourth type has the end-poles cut in a joint halved in with the side-poles (pl. viii, 2); in other respects it is similar to the preceding type.

In the fifth form of bedstead, the danger of the end and side-poles coming apart from each other is obviated by making the tenons of the legs notched into the tenons of the end-poles (pl. viii, 1)."

Plate viii, 1. The late and coarse type of bed-frame, with the tenon of the leg pierced to let the tenon of the cross-bar pass through. Grave 90, S.D. 81.

2. The earlier type with animal legs, the leg pierced to lash it up to the pole; cross-bar halved on, and evidently retained by lashing.

3. The best type of frame, with animal legs, and the cross-bar fixed with tenon. Here the poles are too thin, and so pressure on the head-bar has split them. Grave 54, S.D. 79. The finest example of this type is the earliest of S.D. 77, see 6 and next plate 8–10.

4. Latest and most debased type, formed of four L-shaped pieces of wood, the top of the L being a tenon to fit into the bend of the next piece, the short side of the L being the leg. Grave 512, S.D. 81.

5. Walking-sticks; 62¼ inches long, grave 426; 58½ inches, grave 480; 53½ inches, grave 209.

6. The finest bed-frame, 69 × 32 inches, the separate parts of which are drawn on ix, 8–10. The slots in the inner sides of the poles reach the axis where they meet similar slots from below. Thus the webbing of the bed-frame was put in without covering over the visible wood of the frame. Grave 144, S.D. 77. (Manchester Museum.)

7. Upon the previous bed-frame and webbing was placed a palm-fibre mat, woven in pattern, and stiffened down the long sides by being worked round two palm-sticks. (Cairo.)

8. Another pattern of webbing was of the twisted rush, closely like the modern rush-bottomed stools. The rush was passed round the pole, and then woven into cross-webbing of 4 strands wide.

Plate ix, 1–5. In many parts of the cemetery boards were found which had been re-used in coffins and for roofing the graves. These boards had originally been parts of some entirely different construction. The drawings here show the views and sections through the holes. In pl. x, 3, 4, are the views of two whole boards, which are the full height of the rooms, with the lashing-holes on each side. The larger board shows plainly the weathering outside of the part protected by the overlap. (Univ. Coll.)

These various types of holes are evidently for lashings, and in one of them there still remained a bit of twisted palm-fibre rope.

6, 7. In these plans are shown the various ways in which the different lashing-holes could be utilised to bind together boards overlapping one on the other. The dotted line in each marks the place of the binding cord.

It is obvious that such overlapping boards are exactly the prototype of the stone carving of panelled or recessed doorways, so well known in the Old Kingdom; the design of these was clumsily copied also in brickwork. That this recessed work was copied from overlapping woodwork, I had concluded before, from examining the details of construction shown on the Khufu-ankh sarcophagus in Cairo. See the form of the coffin, xxviii, evidently copied from a timbered house.

Here, then, we have the actual timbers of the wooden houses which served as the prototype of the stone forms, just as in Greece the wooden architecture originated all the stone forms. Why should such wooden houses have been invented? The present customs give the explanation. As soon as the green crops come up, the villagers move out into the fields, and build huts and enclosures of maize stalks to dwell in, so as to be close to their cattle at pasture and to enjoy the cooler air which comes over the vegetation. Here they live till the crops are done and the Nile rises. Then they go back to their houses on the village mounds or the desert. In the same way the early Egyptians probably moved to and fro each year. A wooden house would be used by the more prosperous people, and, as it needed to be moved twice a year, the lashing together of the boards was the best method of construction. As, owing to the extreme dryness, varied by winter rains and fogs, all wood expands and contracts considerably, the system of overlapping enabled enough motion to take place without opening any cracks or leaving gaps which let the wind blow directly in.

This system of overlapping planks was the best for the circumstances. From it we can see the obvious source of the idea of the wooden Tabernacle of the Israelites, built of vertical planks. This realisation of the actual woodwork which afterwards gave rise to the forms of the stone architecture, is perhaps the principal new result of the season's work. There has hitherto been no chance of recovering the wooden houses, as all the sites of that age are far beneath the Nile mud. Most of these planks are weathered on one side by exposure; and one of them is burnt on the other side by a fire in the house to which it belonged. (Manchester, Univ. Coll., New York.)

8–10 have been described under pl. viii.

11–13 are plans and sections of another form of jointing of bed-frames.

14–18. Arrow-points of hard wood, inserted in reed-stems. See x, 7, where the notch of an arrow is also shown. (Ashmolean.)

19. Unusual form of jointing the corners of a tray for burial beneath the body; the dimensions stated in inches.

Plate x. 1, 2. Basket and lid in firm condition, grave 125, S.D. 79. At the side of it another lid of a basket with the original string running through the top for a handle.

3, 4, described with previous plate.

5. Wooden chisels used in digging graves in the gravel. Grave 288 of unknown date.

6. Wooden shadūf hooks, one from grave 249, S.D. 81; the other from grave 558, of the iind or iiird dynasty (?).

7. Wooden arrow-heads, see ix, 14–18. Grave 1051, S.D. 77.

8. Linen ball bound with cord, for children to play with. Grave 518, S.D. 80.

9. Mop (?) of cord and thread.

10. Matting from a grave, put with 11, a modern Egyptian *hasyrah* mat, to show the exact similarity of the work, entirely unchanged in style during 7,000 years.

Plate xi. 20. Wooden model dagger, see photograph i, 1.

21. Wooden bowl, carved out of one piece, with a ledge handle left at the side, the suspension hole in which is broken out. (Univ. Coll.)

22, described under iii, 2.

23. Wooden table with four feet, see under-side xii, 7; this was doubtless used for standing vases and food on upon the ground, so as to keep them from the grit and dust. (Manchester.)

24. With 23 was also found the sandal tray; see xii, 10. The outline of a foot on the cross-bar indicates that it was intended for the foot to be placed on it, and the tray would naturally be for carrying the sandals ready to be strapped on. The bar in this is in one piece with the bottom, beneath the foot, only being pierced through near each end, as shown in the side-view. (Ashmolean.)

25. Wooden sandal-tray, see xii, 11, differing from the preceding by having the bar entirely cut through beneath. (Manchester.)

26. Wooden dipper, probably used for filling water-jars; see xii, 9. (New York.)

27. Wooden tray with sloping sides; see xii, 8. (Manchester.)

Plate xii. These objects are noticed with the drawings, which give accurate scale and grave number. 1 with vii, 6; 2 with xiii, 13; 3–5 with xiv, 31–33; 6 with xiii, 1–6; 7 with xi, 23; 8 with xi, 27; 9 with xi, 26; 10 with xi, 24; 11 with xi, 25.

38. Plate xiii, 1–6. Ivory spoon, carved with five rows of animals around it, and a couchant calf upon the handle; 1–3 show the sides and end continuously; 4 is the top view of the inside and handle; 5 is the water pattern on the bottom, and the development of the rows of animals round the handle; 6 is the end of the bowl joined by the handle and almost touched by the neck of the calf; see xii, 6. In style it is closely like the ivory carvings of the same age from Hierakonpolis (*Hier.* xiii, 2). The animals seem to be intended for oryxes and dogs. (Cairo Museum.)

7–15. Various ivory spoons, two of S.D. 77, five of S.D. 79, and one of S.D. 81. Thus the main period of burying such articles of luxury was the beginning of the ist dynasty; 12 has another piece of handle, actually extending to 5 inches from the bowl; 15 has a handle carved to imitate a snake; it was found broken, and the head could not be discovered. A carnelian bead was with it. (Ashmolean.)

Plate xiv, 16, 17. Animal legs for small stands, copied from the larger legs of wood, such as 18, used for seats and bed-frames. Similar carved legs were found in the royal tombs (*R.T.* I, xxxiv).

19. Alabaster case in the form of a scarab, described with iii, 4.

20–22. Gaming-pieces of ivory. Similar pieces were found in the tomb of Zer (S.D. 79) at the royal tombs, see *R.T.* I, xxxiv, 89, 90; xxxv, 5; and xxxii, 34.

24. Domed draughtsman.

25–26. Portions of a set similar to the next two.

27. Glazed beads found with 28–30.

28–30, 31–33. Sets of gaming-pieces. Similar sets of uniform rods of ivory have been found in the tomb of Zer (*R.T.* I, xxxiv, 56–61) and in prehistoric graves (*Naqada*, pp. 14, 26, 34, 35, pl. vii, lxi). The sizes vary so much (from 1·95 to 7 inches long) and so irregularly, that there does not seem to have been any standard size; they were usually equal in one set as in 33, but might be different as in 29. (Cambridge.)

34, 35. Gaming-pieces of ivory; see 20–22 similar.

36, 37. Hair-pins of ivory.

38, 39. Draughtsmen of ivory.

40–45. Various gaming-rods of ivory.

The majority of these gaming-pieces belong to the earlier period, before the changes of deterioration which set in clearly by S.D. 80.

The principal groups of beads that were found are shown at the bottom of this plate, and as the materials are named, further description is not needed.

CHAPTER VI

THE BURIALS

39. THE largest tomb found was a great mastaba, of the middle of the ist dynasty, S.D. 80, which Mr. Wainwright has fully described in a previous chapter, and illustrated in pls. xv–xx.

Plate xxi. The historically dated burials are figured here. They had all been plundered anciently. Grave 412 is shown in two views, one taken from each end; the connection of them is best seen by looking at the jars opposite the letters A, B, C on the right side of each. This grave contained the name Tahuti-mer, xxxi, 71, and by its form and position it is clearly of the same age as the adjacent grave with the name of Narmer.

414. This grave contained the large jar with falcon name of Nar-mer, xxxi, 68 (Univ. Coll.), and impressions of four seals (ii, 1–4) on the clay capping of jars, which had been broken up by the plunderers.

261. This grave contained a cylinder jar, with the name of King Ka, thus dating it to some time before Mena.

All of these graves are in plan, section A, pl. lxx. They have been described in the accounts of separate graves under S.D. 78.

Plate xxii. 170 is remarkable for having two bodies in one coffin, placed head to feet. Described under S.D. 80.

1034. Two adult burials, one in front of the other, and a child buried in a pottery coffin. Alabaster jars to the right of the coffin. Described under S.D. 81.

1035. Body in mud coffin; note the head reversed. Such coffins were rare at Tarkhan, where wood was commonly used, but they were common at Turah. See under S.D. 81.

1007. A dismembered burial with all the bones out of connection, but roughly placed in the order of a contracted burial. As no pottery was found with this, it cannot be dated.

479 is a view of a pit in which wooden hoes and chisels were found left with a basket and a bowl, but without any burial. It seems to have been an unfinished grave left by the workmen, like one at Deshasheh (*Desh.* 33).

Plate xxiii. First is a burial capped with a thick layer of mud, belonging to a type of which many examples were found and cleared by Mr. Mackay, to the east of group B, pl. lxix. These are later than the ist dynasty, and will be described in the second volume.

257. The peculiar position of the roofing-poles placed diagonally over this grave is seen here.

42. Grave with large roofing-beam, 6 inches thick. Contents described under S.D. 78.

3. Roofing intact, with short branches put below three long branches. This arrangement was probably because the reed-covering went across the grave, and the long poles were to prevent the reeds slipping between the cross-poles. Described under S.D. 79.

Pl. xxiv, 175. Top view of coffin cut out of a single log, and position of bones in it found dissevered, after removing cloth covering. The lid has a handle at one end; probably this was originally a clothes-box, as it is much too small for a coffin. See under S.D. 79. (Brussels.)

175. End view of the above coffin to show the absence of joints.

203. Coffin of which the sides and base are cut from a single block, while each end is made of two boards inserted by halving in to the sides. See under S.D. 79.

At the bottom is a photograph, nearly full size, of a roughly sawn surface of a coffin, which shows the varying direction of the sawing.

Pl. xxv, 216. A burial in a recess, of the iiird-ivth

dynasty, showing the mode of bricking up the opening, and the position of the coffin when the bricks are removed.

207. Reed coffin, unopened, with rope tied round it.

The same opened, showing a contracted burial, with head-rest formed of a single piece of wood. iiird-ivth dynasty.

Pl. xxvi, 529. Basket-work coffin, date not fixed by pottery; probably of late ist or iind dynasty.

1004. Basket coffin with lid on, and with lid removed showing body tied up in a lump of cloth. The head-rest was found in fragments in the open pit outside of the bricked-up recess. See undated graves. Now in Cairo Museum.

Pl. xxvii, 902. Contracted burial in wooden coffin, S.D. 80. This burial was remarkable for the perfect condition of the linen upon it, which was not in any way discoloured. Yet there was no trace of flesh or skin between the linen and the bones. To suppose that the whole of the flesh would disappear by oxidation, while the linen over it remained entirely clean of stain, and firm without any oxidation, seems quite impossible. Unless some parallel case can prove such selective change possible, we must accept the fact that the bones were entirely unfleshed, and then wrapped up as seen in the photograph.

217. An instance of a coffin in a recess, with ropes still around it.

208. Contracted burial in a long coffin, with natural branch head-rest. Compare contracted burial with similar head-rest in 207, pl. xxv.

234. Full-length burial in long coffin, the head on a composite head-rest, built up with stick supports. Classed by Mr. Mackay among the vith-dynasty burials.

286. Long coffin of thick wood, with original ropes still around it. Beyond that two other long coffins of thick wood, probably of the vith dynasty or later.

Pl. xxviii. Coffin of the early iiird dynasty probably, grave 532. The front of it shows the copying of the wooden house type. The three doorways with rounded beams over them are imitated, the two wider spaces between being copied from wide openings barred across to exclude men and animals from the house when the shutters behind the bars were opened. The slightly curved roof is still known in Nubian houses.

Below are seen the inside of the curved lid, showing its construction, also the coffin as it stood in its rock pit; and the same, opened, showing the body with three cross-bars of the lid fallen upon it.

A similar coffin was found by Mr. Quibell by the tomb of Hesy at Saqqareh, which belongs to about the beginning of the iiird dynasty. (Cairo.)

STAIRWAY TOMBS. There remain to be noticed three tombs which are not photographed. One, 1004, is that which contained, in a recess, the best basket coffin, now at Cairo. The stairway is 16 inches wide, with four steps down to a pit 30 long by 50 wide; in the end of it was the recess 25 wide spreading to 40, and 56 deep inwards. This was recorded by Mr. Wainwright. Two others are recorded by Mr. Mackay.

Grave 240 had a shaft N. 85, E. 43½, 125 deep, with six steep steps on E. On the W. a recess N. 39, E. 48, 32 high; in it, a contracted burial in a box coffin, entrance closed by stone slab. The three alabaster vases in this grave agree well to others of S.D. 81, and there seems no reason to doubt this dating, as other stairway graves have been found at Naga ed Deir of this age.

Grave 545 had a shaft N. 115, E. 38, 180 deep, descent by steps on E. On W. a recess N. 60, E. 41½, 35 high; in it a contracted burial in a panelled box coffin, much decayed; entrance closed by small blocks of stone with mud mortar. A later shaft had been cut into the chamber and disturbed it. At the bottom of the shaft of 545, which was undisturbed, were pieces of a pottery jar, type 68 *l*, which belongs to S.D. 81, 82.

CHAPTER VII

THE SLATE PALETTES, MARKS, CORPUS, AND REGISTERS

40. Pl. xxix. The slate palettes are mostly of forms that are already well known in Upper Egypt. Several of them had still upon them the patch of malachite which was ground; and one of the quartz grinding pebbles, 12, has much of the surface in the middle covered with malachite, lightly shaded in the drawing. The new type is that of the slate copied from a fish form, and slightly hollowed as a dish, 29, 30. The smaller is dated to 81, but the larger one had nothing else with it by which to date it. The figure of the couchant gazelle, 27 (see i, 5), is better worked than any slates found at Naqadeh or Diospolis.

Pl. xxx, 1–5. The sealings found in mastaba 1060 differ from any found in the Royal Tombs; but they most resemble the style of those from the tomb of Zer (*R. T.* II, xvi) and Zet (*R. T.* I, xix), and may well date in the reign of Zet, S.D. 80, between these two royal burials. Compare 1 with *R. T.*, sealing 43; 2 with *R. T.* 16.

The marks are, many of them, already known at the Royal Tombs, which may naturally result from jars being sent from a single factory or from a single vineyard. The connections of the more distinctive and peculiar marks that may be noticed are:

Tomb 1060 S.D. 80.	Mark	S.D.	Royal Tombs I Mark	S.D.	Royal Tombs II Mark	S.D.
14	89	79	594–601	80, 81	179, 180	79–80
20	132	81	545	81		J 80
25	127	81				
27–9	136	81	669–695	80–82		
30	118	81	1122–	80, 81	74, 365	79
32	85	79	. . .		175	81
36	123	81	499–504	80–82	142–150	79–81
37	155	81	552–6	80, 81	166	81
38	88	79				
40	84	79			162	81
43			914–33	80, 81		
64	140	81	. . .		492	80
	83	81	513–8	81, 82		J 80
	104	?	. . .		234, 337	81
	117	80	. . .		457	80
	118	81	158, 1067	81, 82		
	121	81	. . .		322	81
	138–9	81	. . .		39, 40	81
	172	81	859	80	. . .	
	189	81	. . .		96–8	81

In the last column are two signs quoted from Junker, marked J, with date 80. As the range of marks at the Royal Tombs, closely dated, ranges over two, and sometimes three, units of date, it is not surprising to see differences of one unit between tomb 1060 and the parallel examples. But 1060 cannot be shifted either earlier or later on the strength of the marks, as they balance some each way. The other marks, 83 to 189, agree exactly with Royal Tomb datings in six, and only differ in one by a single unit. On the further question of the purpose of such marks see *The Formation of the Alphabet*, 1912.

65–71. These regular hieroglyphic writings in ink, and cut on pottery, 68, have already been noticed in describing the graves in which they were found.

66, 67, are of king Ka.

68 is of Nar-mer.

69, probably of Nar-mer.

70 is illegible, but by the outer signs, like the last, it is perhaps of Nar-mer.

71 is of a private person, Tahuti-mer.

41. THE CORPUS. Pls. xxxii to xliv. Stone vases. Here all the forms of stone vase found at Tarkhan and at Turah are drawn to a scale of 1 : 2, reduced to 1 : 3. The system of registering is to have a number for each distinct type, and add a letter for the minor variations. The numbers are not consecutive, as room is left for the insertion of other types of the Old Kingdom, when this *corpus* is completed down to the vith dynasty. The reference-number and letter are at the top right hand. The sequence-date number is at the bottom right hand, and the grave number at the bottom left hand. J is put to those types only found and published by Dr. Junker.

Pl. xlv. List of types of stone vases, with the number of examples, recorded under each sequence-date. As there are only six dates concerned here, 77–82, each date has a separate column of numbers assigned to it, divided by a dotted line between 79 and 80. Thus it is easy to see whether the number is at the left, middle, or right of each division. The actual number of examples is shown by Roman numerals. As the letters denote only minor differences, the general range of a type is seen by viewing all the examples of the same number, such as 24 or 62. Some varieties began earlier, as 24 *c*, *g*; then followed 24 *e*, *j*, *r*; and the main frequency is in S.D. 81, with 24 *l*, *p*, *r*, *t*, *v*. In 62 none are known before 79, and the main period is 81. Other types were earlier, such as 51, mainly in 78, with some appearing in 80. Where no dating is known a circle is put on the dividing line. J is put for examples of date in Junker's Turah cemetery.

Pls. xlvi to lviii. Pottery vases. The arrangement is like that of the stone vase drawings; only, as the number of examples is so much greater, the grave numbers are omitted; they can be found quickly by looking over the register tables, lx–lxvii. It can be seen from this table, which forms a diagram, how common certain types are, such as 12, 46–50, 59, 60, 63, 65, where dozens are recorded to each; while others are known only by single examples. This denoting of the number of examples is very needful

for judging of the range of date for a grave. It would be absurd, for instance, in 48*s* to say that a grave with it might be 81 when only a single instance is known so late, and nearly all are on 78. In this list the number of instances in the dateable groups of Dr. Junker are shown by the number *following* J ; as in 50 *t* there are fifteen in Junker of 80 S.D., 1 at Tarkhan, and 1 of Junker of 81 S.D.

The use of these tables is both for testing the degree of certainty of the dates of the graves in the register here, and also for ascertaining the dates for any further tomb-groups that may be found.

42. THE REGISTER. Pls. lx–lxvii. The detail of the formation of the register by the dating of the graves has been described in the chapter on the dating of the graves. The meaning of the several columns is stated at the foot of the first page, lx. It must be remembered that the dating is not equally definite for each grave. Many cannot be put to any other date ; others have a possible range of two or three units, and such are entered here to the middle of their range. Before any important conclusions are drawn from the date of any grave, the pottery and stone should be looked up in the tables of types, xlv, lix, remembering always that one stroke in the table is due to the grave which is being studied, and only the remaining numbers show other evidence for the date of the type referred to. Thus it will be seen what range the date of the grave in question may have. It may be thought that too many shades of form have been expressed by the letters, and no doubt many of them might safely be lumped together. But it is hopeless to find variations that are significant unless we denote variations by a more minute scale than that of the changes which may be of consequence. To take a parallel, we can never detect variations of inches in a building if we only measure to the nearest foot.

Regarding other excavators' results : Dr. Junker's contents of graves being already expressed by a uniform *corpus*, all of his groups of any significant size are here included ; Dr. Reisner's graves being registered by separate photographs and drawings, his group-photographs (so far as they can be safely identified) are here given, but the drawings are rather too small to show the differences of type safely. Drawings that are not tabulated to any uniform *corpus* can hardly be used in general reference ; the necessary work of tabulated registering must always be done by the finder.

Pl. lviii. To save comparison of drawings by future students, a table is here given of conversion of the prehistoric *corpus* numbers into the present *corpus*, so far as those types survived. Also a table of conversion of all Junker's *corpus* numbers into the uniform *corpus* here given for both pottery and stone.

43. PLANS. Pls. lxix to lxxvi. Pl. lxix shows, at the top left, the outline of the district from Kafr Ammar to Gerzeh, where the prehistoric cemetery was excavated last year by Mr. Wainwright. This year's work is delimited by a square marked "Cemetery" at the north end.

The plan of the cemetery has the contours sketched in, to show the general position. It will be seen that nearly all the knolls and high ground contained cemeteries, which were excavated and planned. The lower ground and valleys also contain graves, but these, being covered with thick sand, were left alone, to be excavated in the following year. It is intended to issue a more detailed and precise plan when the work is finished there, but the present outline will suffice to show the relation of the different cemetery plans following this.

Pls. lxx to lxxvi. The separate cemeteries are here given in detail, with each hole that was dug marked down. The solid black marks are the early graves that we deal with in this volume. The later shaft graves and tombs are marked with an open square with diagonal lines across it. All graves of which the numbers are stated, are referred to by a list in the margin, with the entries opposite to the grave, and with the sequence-date. This list enables any numbered grave to be quickly traced.

The numbering of the graves was done by writing on pieces of white limestone, and putting the mark by the grave, with another stone on it to protect it. Unhappily the limestone proved very liable to crumble away when thus protected ; exposed marks lasted better, although we had violent storms of wind and rain. When we came to do the survey the larger part of the marks proved illegible. Hence not nearly so many graves are numbered here as were registered. Roughly speaking, from my own share of the work nearly two-thirds of the pits were registrable, others containing nothing or only a few fragments of undateable pottery ; of these two-thirds, about half, lost their numbers, so that one-third of my pits are numbered. Though there was some crossing of workers, yet the general allotment of the ground resulted in the following distribution among the four responsible for registration.

	F.P.	E.M.	G.W.	R.E.	Total.
Total of pits .	165	457	388	191	1201
Card registers .	94	153	141	268	656
Graves numbered	51	65	22	29	167

The total of cards filled up with registers was 656, of which 304 are dateable to the early period dealt with in this volume. Mr. Wainwright's register nnmbers were all over 1000. Mr. Engelbach registered many on Mr. Mackay's ground. The general survey was done by myself, and the laying out of the lines for offset work. Plans A to H, K to O, were filled in by myself, J was filled in by Mr. Engelbach, P to S by Mr. Wainwright. Mr. Mackay supplemented later graves, mainly in E.F. Beside doing the 165 named above, I also cleared and registered many on the grounds of other workers whenever there was any pressure of work.

In the plans, xi, xxiii, and other marks, are occasionally put to graves, showing the dynasties of late graves which are not numbered.

The general periods of the various cemeteries can be readily seen by looking down the marginal dates. A is of 78 to 80, B 77 to 79, C, D are almost entirely late, E is mostly of vi to xi dynasties, but with a few early graves of 77 and on. F is mainly early and xi dynasty. G was all early, 78–79, and finely lined graves. H was from 78 to 81, and J mainly of the middle period 79 to 81. L had a few early graves, but was mainly late. N was the earliest, being all of 77. The other cemeteries have not enough dated graves to specify, but P to S contained a large quantity of late stone vases of S.D. 81 registered with numbers over 1000. The cemetery of Turah was far more regularly occupied; all of one end is of S.D. 78, all the other end 80 and a few 81, and the middle S.D. 78, 79, and 80 mixed.

Places to which Stone Vases and Groups have been sent

Aberdeen: 187, 240, 512.
Bolton: 143, 1028.
Brighton: 297, 1003.
Bristol: 89, 112, 170, 297, 1003, 1011.
Brussels: 53, 552.
Cambridge Ethnol.: 118, 133, 212, 1059, 1062.
„ Fitzwilliam: 80, 204, 351, 1060.
Cape of Good Hope: 54, 104, 108, 149, 177, 199, 294, 431, 1008, 1012.
Carlsberg: 146, 189, 219, 230.
Dublin: 149, 213, 231, 233, 1020.
Glasgow: 24, 82, 263, 269, 312, 1034, 1042.
Leicester: 167, 230, 238, 283.
Manchester: 7, 21, 89, 101, 136, 1015.
Newark: 86, 117, 127, 1016.
Oxford, Ashmolean: 126, 160, 178, 231, 312, 474, 1031.
„ Pitt Rivers: 149, 158.
Reading: 89, 1020, 1025, 1029.
Rochdale: 249, 298, 1017.
University College, London: 10, 13, 19, 20, 36, 61, 81, 85, 100, 107, 153, 165, 191, 231, 250, 261, 315, 414, 1023.

List of Graves, described in the Order of the Sequence-dates, Chapter III

Grave.	Date.	Grave.	Date.
3	79	203	79
8	78	204	80
9	78	213	81
16	78	230	80
20	78	231	81
27	78	260	78
37	78	261	78
39	78	278	79
42	78	279	79
43	78	315	77
54	79	412	78
60	80	414	78
61	81	415	80
80	80	432	80
86	77	466	77
88	81	474	79
89	81	527	77
96	N.D.	538	80
101	81	804	77
104	77	901	78
107	81	1004	N.D.
120	81	1006	77
122	81	1007	N.D.
136	81	1013	80
137	80	1015	77
141	77	1016	81
144	77	1018	81
149	80	1023	78
158	81	1034	81
169	81	1037	77
170	80	1051	77
175	79	1060	80
195	80	1062	77
197	78	1063	77

References from the Grave Numbers to the Plates

All stone vases and pottery references are given in the register lx–lxvii

Lithograph.	Grave.	Photo-graph.
	3	xxiii
iv 13	7	vi 6
xiv 31–3	10	xii 3–5
vii 14, xxix	16	
iv 2, v 15, vii 12	17	vi 1, 2
xi 20	20	i 1, iii 6
xiii 8, xiv 38–9	21	
iv 1, 7, vii 1, xiv 55	22	
xiv 19	27	iii 4
	36	iii 5
iv 12	37	
xxix 3	41	
	42	xxiii
xxix 12–13	52	
vii 8, 9	53	i 2
xxix 17	54	viii 3
iv 11	80	
xxix 9	81	
xiii 13, xiv 50, xxix 10	86	xii 2
xxix 27	87	i 5
	90	viii 1
ii 14, 15, xiv 58	97	
xxix 8	104	i 11
	112	i 8
ii 10, xiv 17, xxix 24, 29	117	
vii 3	118	
iv 4, 14, v 25	122	vi 3–5
ii 9	130	
vii 13	131	
xi 23, 24	136	xii 7
xi 25, 27	144	xii 8, 9
xxxi 65	148	
	149	iii 3
ii 21, vii 6, xi 26	158	xii 1, 11
xiii 11	165	
iv 5	170	xxii
	175	xxiv
xiv 54	178	
vii 10	181	
xxix 1	185	
xiv 40–41	186	
ii 5	187	
xiv 52	190	
xiii 9, xiv 42–4, 46–7, xxix 14, 15	195	
[illegible]	203	xxiv
	207	xxv
	208	xxvii
xxix 25	212	
ii 11, xi 22	213	i 7, iii 2
	216	xxv
	217	xxvii
	231	iii 1
	234	xxvii
ix 19	250	
vii 7	256	
	257	xxiii
xiv 48, xxix 7	260	
xiv 51, xxxi 67	261	i 6, xxi
xxix 16	263	
ii 7, 8, 12, xiv 60–61	269	vi 14
xiv 27–30	271	
ii 13, 16, xiv 57	278	
ii 6	279	
	286	xxvii
ii 6, xiv 56	293	
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MEMPHIS

CHAPTER VIII

THE EXCAVATIONS

44. When first surveying the position of the wall which surrounded the great temenos of Ptah, I had noted some blocks of granite on the northern side, and expected that these would show the place of the great north gateway, which is described by Herodotus as having been built by Moeris—Amenemhat III, of the xiith dynasty. With the view of searching for the gate, this part was taken in hand as the main Memphite work of this year, Mr. Mackay being in charge of this site.

The position of the north wall I had presumed to be shown by the pathway which leads eastward from the north end of the village of Mitraheny. Such proved to be the case, doubtless owing to the harder brickwork giving a better footing amid the swampy low ground. The present *saqieh* water-wheel for irrigation is just inside the wall, and just west of the gap of the gateway.

The remains found seem to show two periods, that of the xiith and xixth dynasties. Of the earlier work there remain two great blocks of quartzite, mainly lying north of the great wall. One is part of a gateway jamb 7 feet high, running 9 feet 7 inches along the thickness of the gateway, and 3 feet 4 inches thick. Fifty feet south of this lies the fallen lintel, deep down; it is 12 feet 11 inches long, 4 feet 2 inches high, and 30 inches thick. The inscription on it is shown at the top of pl. lxxvii, "the king Ne · maat · ra giving life eternally". This grand block of Amenemhat III thus shows that Herodotus was correctly informed as to the builder of this gateway. The plan of these and other remains is not given, as it is hoped to extend it further this year.

The present form of the great brick wall is probably Ramesside. The thickness of this gateway is 36½ feet; and the gap in the brickwork formerly filled by the stonework of the gate, is 115 feet wide. Of the great stone gateway nothing remains, such large blocks of squared stone were the most attractive to later builders. South of the inner face of the wall are four column bases; three in a row, and doubtless another missing; the fourth base being one of a second row. These seem to have been part of a colonnade entrance way, with four files of columns, and five lines of path. They cannot be part of a peristyle hall as they are too close to the great wall. Nor can they be merely bases re-used for foundation—as is often the case—because on one of them is still standing part of a column in place. The bases are 15 feet 6 inches wide, with a space of 4 feet 7 inches between them; thus the columns were 20 feet 1 inch centre to centre, and being 5 feet 11 inches diameter, the intercolumniation was 14 feet 2 inches, or 2·40 diameters. The axis of this colonnade gateway was rather east of the earlier gateway; for it lies 16½ feet from the early jamb, and we cannot suppose a gateway of 33 feet wide.

Outside of the great wall a clearing was made 65 feet northward and about 200 feet along each face, without meeting with any statuary or monuments.

45. Scattered within the temenos were found two groups of foundation blocks and five large monuments, in the cleared area of about 130 by 400 feet.

(1) The red-granite dyad of Ramessu II and Ptah; see pl. lxxvii, and the side-view of the upper part of the figures on pl. lxxviii. The work is as good as any red-granite work of that age, and the faces are absolutely perfect, as we have noticed to be the case on other statues of Memphis. The inscriptions are only the usual titles and devotions to Ptah, found on innumerable other monuments. The crowns were cut in a separate block, and the figures had been broken clean in two by falling over. The whole height is 5 cubits, 8 feet 7½ inches, width 4 feet 8 inches, thickness 25 inches. This group is now at Ny Carlsberg Museum.

(2) Another dyad of the king and Osiris was found, but was too badly injured to be removed.

(3) The red-granite sphinx of Ramessu II is 11 feet 5 inches long, and 7 feet 1½ inches high, see top of

pl. lxxviii. Unfortunately the head has remained exposed after the body was covered with rubbish, and it has thus been weathered away. This has been raised, and will be sent shortly to a museum.

(4) The quartzite sandstone seated figure of a scribe, (see base of pl. lxxviii), is unfortunately headless. Perhaps one of the various quartzite heads now in museums will be found to fit it. It is of a scribe Amenhotep, who lived under Amenhotep III. Except on the lap the inscriptions around it are in perfect condition; and are here given, from paper squeezes, on pls. lxxix, lxxx. They have been carefully revised by Dr. Alan Gardiner, who has kindly contributed a discussion of them in the next chapter. This figure is now in the Ashmolean Museum, Oxford.

(5) An alabaster head of a colossus, 45 inches from the top of wig to base of beard, is apparently of Ramessu II. It was too much injured to be removed.

(6) A limestone head, about half life size, shown on pl. lxxviii, is of very good work, but much bruised. Ny Carlsberg Museum.

At the base of pl. lxxviii is part of a trial-piece of a golden vulture, the hieroglyph *a*, found in some digging in the city.

CHAPTER IX

THE INSCRIPTION OF AMENHOTEP

By ALAN H. GARDINER, D. Litt.

46. THE statue of the Royal Scribe Amenhotep (pl. lxxviii) is chiefly remarkable for the wealth of inscriptions that cover it on all sides (pls. lxxix, lxxx). In itself, it does not differ in any essential particular from other statues of scribes of the Eighteenth Dynasty. The high dignitary portrayed is represented in the usual attitude, seated cross-legged, his papyrus extended on his lap ready for use. The head is missing, and with it have disappeared a few words from each of the vertical columns of hieroglyphs that occupied the right-hand side (ll. 19–20) and back (ll. 21–26) of the plinth. The inscriptions, which form a continuous text, are otherwise complete, except where the quartzite sandstone in which the statue is carved has weathered, or has been bruised, so as to render the signs illegible. The text begins on the unrolled papyrus in the lap (ll. 1–7), thence continues on to the top (ll. 8–10) and front (ll. 11–14) surfaces of the base, thence along the side of the base under the right arm (ll. 15–18) to the back (ll. 19–20, 21–26), from here on to the left thigh (ll. 23–24), and finally to the upper (l. 44) and vertical (ll. 45–49) surfaces of the left side of the base.

Translation

(1) (This statue was) given as a favour [from the King] (and placed) in the House of Nib-mu-rē[1] (named) "United-with-Ptah" which his Majesty newly made for (2) his father [Ptah South-of-his-Wall in his] cultivated land[2] west of Het-ke-Ptah[3]; on behalf of the hereditary prince and toparch, treasurer of the King of Lower Egypt, loved of the Lord of the Two Lands, (3) great [in his rank and exalted in his office], a magistrate at the head of the King's notables, the eyes of the King of Upper Egypt and the ears (4) [of] the King of Lower Egypt, . . . [well-acquainted] with the way to the Palace, the mouth that gives satisfaction in the Royal dwellingplace, excellent of (5) speech (?) . . . the veritable scribe of [the King] beloved of him, Amenhotep.

He says:

I speak to your worships, (6) ye who are yet to come into being, [men] of the future [who shall live] upon earth. I served the Good God, the [joyful (?)][4] prince, (7) the King of Upper and Lower Egypt Nib-mu-rē, when I was young and without kindred (?). When I was grown old and . . . (8) . . . I entered into the Palace when he was in private, so as to behold Horus in this his house; and the nobles walked behind (?). (9) He gave me marks of favour on account of my excellent demeanour, and promoted me [to be] Chief Steward, and my stick was on the heads of the people. I became wealthy (10) in serfs, cattle and possessions of all kinds without a limit, and [there was nought] to be desired, by (11) the favours of the Lord of the Two Lands Horus Kha-m-māet. I performed Right [for . . .] Re, for I knew that (12) he lives thereon; my abhorrence was [false]-speaking.

He promoted me (13) to direct the constructions in his House of Millions of Years, which he newly made in his cultivated land west of Het-ke-Ptah (14) in the district (?) of Enkh-toue[5]—it was his father Ptah who

[1] Amenophis III; note the unusual manner of writing the prenomen with a single sign, here and several times below.

[2] Lit. "ground liable to be inundated."

[3] A common designation of Memphis.

[4] I can suggest nothing but *ew yeb*—though there is no trace of the downward curve to the right of the upper sign.

[5] Another name for the region of Memphis.

. . . and waited (??)[1] —(15) as a monument for his father Ptah in excellent eternal work in white stone of Ain. Its beauty was as the horizon of heaven ; all its doors were of cedar of the Terraces, of the choicest of Gau, (16) wrought with gold from the desert, refined gold, and all kinds of precious stones. (Its) halls and (its) gateways were of . . . ; a great . . . of everlasting work as a rampart (17) of fortification. Its lake was dug, and planted with trees, and made radiant with every kind of precious wood of the choicest of the Divine Land. Its vessel-stands [were of] silver and gold . . . and all manner of hard stones.

(18) Now when these constructions had been completed in beauteous fashion, his Majesty instituted new divine offerings consisting of daily oblations to his father Ptah South-of-his-Wall and to the gods of [this] House ; (19) they being supplied with food for ever. And he appointed *wēb*-priests and prophets of the children of the magnates of Inbu,[2] and appointed fields and cattle, field-labourers and herdsmen [from the] (20) spoils of his Majesty which he had brought back from every land. All the offices of this temple his Majesty filled right well, and it was his Majesty who performed it (thus) worthily and lovingly (??). (21) . . . And his Majesty caused this House to contribute provisions (?) to the House of Ptah in all its statutes even as the Houses of the Kings of Upper and Lower Egypt which are beside his father Amon in the Southern City; it being controlled by every steward of the King (22) . . . its bread for ever.

Now behold, I appointed property by written deed out of my fields, my serfs and my cattle on behalf of the statue of Nib-mu-rē whose name is . . (23) which his Majesty [had made] for his father Ptah in this sanctuary. Specification of the same :—

Fields, 210½ acres.

In the Northern Province, fields 220 acres, of what had been given to me by the favours of the King.

Total, fields, [430½] acres.

[in addition to . . .] (24) . . . 10 . . . 1000 egg-laying geese, 1000 pigs, 1000 young (?) pigs. His Majesty praised me on account of it, inasmuch as I appeared excellent in his heart. I attained a venerable age in the favour of the King, and I delivered up (my) bodily frame (?)[3] to the sarcophagus after a lengthy old age; I became united with my tomb [in the Necropolis . . .]. (25) My [respect] was with the courtiers, my love with all men, and my favour was established in the Palace.

His Majesty gave to me divine offerings of that which had gone up before his processional statue in his House "United with Ptah" [which he made in (26) his cultivated land west of] Het-ke-Ptah. When moreover the god has sated himself with his possessions and this statue (also) has received its meals then provisions shall be caused to go up before this humble servant by the hand of the lector who is in his house, and the *wēb*-priest of the hour shall make offering . . . (27) . . . [according to the] ritual in the course of every day. List thereof :—*bit*-cakes (amount used in cooking 30), 20 cakes ; *bit*-cakes (amount used in cooking 40), 30 cakes ; *bit*-cakes (amount used in cooking 100), 100 cakes ; *persen*-cakes (amount used in cooking 30), 20 cakes ; *persen*-cakes (amount used in cooking 40), 30 cakes ; total, various kinds of offering-bread, 200. Beer (28), (amount used in brewing 30), 10 jars ; lard (?) 2 jars (?) ; one fore-leg of every bull that is delivered in (29) this House ; wine, 1 *hin* ; milk, one pail ; cakes (30) of white bread, 2 ; ordinary geese, 1 ; vegetables, 6 bundles ; . . . 3.

(31) (Thus) say I :—Listen, ye *wēb*-priests, lectors and prophets of "United with Ptah," and every steward of the King (32) who shall exist hereafter in Inbu. His Majesty has given to you[1] (33) bread and beer, meat and cakes, and all manner of goodly things to nourish you in (34) his House "United with Amon" in the course of every day. Do not covet (35) my provisions which my own (?) god decreed for me so as to do me (36) honour[2] at my tomb. I have not made mention of more than my own belongings I have not demanded aught (37) over and above ; forasmuch as I appointed property by written deed for this statue of the King which is in (38) this House in exchange for his giving to me divine offerings of the offerings that come in and go up (39) before his processional statue after the ritual-sacrifice has been made, so as to establish my provisions (40) for future generations yet to come. For I was a man (41) just upon earth, of whom his god knew that he would

[1] I have attempted to render this difficult sentence literally, but do not understand the sense.

[2] Yet another name for Memphis.

[3] Lit. "wood."

[1] As it stands, the text can only be translated, "His Majesty has given to me and to you," though even here there is a grammatical difficulty. The argument is, however, evidently as follows : You have been already provided for by the King ; therefore do not covet my portion.

[2] Lit. "to pour water for me" the expression must be understood in a wider sense.

increase his beauty, one who acted well to the servants (42) of his house. I drove no man from his rank. I cheated (43) none other of his possessions. I took not away the possessions of others by fraud. My abhorrence (44) was cheating.

This I say too further. Every steward of the King whom there shall be in Memphis, every scribe, every lector, and every *wēb*-priest of this House, the lay-priests of the entire temple, (45) and whomsoever there shall be in this House who shall hinder my provisions which Ptah South-of-his-Wall decreed, (even) my noble god who lives upon truth and who fashioned his own form, of that which the King Nib-mu-rē gives to me so as to make offering to me at my tomb by reason of the greatness of my favour with him; (such a one) shall this (46) noble god visit with his displeasure; his office shall be taken away before his face, and given to a man who is his enemy; his *ka* shall be absent from him,[1] his house shall fall to the ground.

But every steward of the King whom there shall be in Inbu, every scribe, every lector and every *wēb*-priest of this (47) House, the lay-priests of the entire temple, and whomsoever there shall be in this House who shall grant my provisions to the lector who is in my house in the course of every day; him shall this noble god praise; he shall pass his life in peace and without strife; he shall [attain] (48) a venerable age and hand on his office to his children after a prolonged old age; all his years shall be happy and without sorrow; his name shall be good among men, and no evil shall come upon him. For I was (49) a man just and equitable upon earth. I gave bread to the hungry, water to the thirsty. I did that which men are pleased (withal) and that which the gods praise.

47. The statue of Amenhotep was not found *in situ* and we lack direct archæological evidence as to the location of the sanctuary where, as the first line of the inscription relates, the favour of King Amenophis III caused it to be set up. This sanctuary is often referred to in the text as "the House of Nib-mu-rē 'United with Ptah'" and once is called "his (the King's) House of Millions of Years" (l. 13). The latter epithet implies that the temple belongs to those known as funerary temples, a Memphite counterpart of the great edifice which Amenophis III built at Thebes, and of which little now remains except the famous Colossi. It is probable that this Memphite temple, like the Theban one just named, stood on the very fringe of the cultivation; and with this agrees the statement that it was erected on "the cultivated ground *west* of Het-ke-Ptah (ll. 2 and 13). For the proper understanding of our inscription it is necessary to make sure that the nature of such funerary temples is rightly apprehended. Historically viewed, they are the descendants of the old Pyramid-temples, which immediately adjoined the Pyramids and were approached from the valley by an imposing portal with a causeway behind it. In the xviiith Dynasty at Thebes the actual burial-place and the buildings devoted to the cult have become completely divorced; the body of the Pharaoh rests in an underground sepulchre far away in a desert wady, while his cult is celebrated in a stately temple near the cultivation. At the same time the religious significance of these funerary temples undergoes a change. They are still the "eternal habitations" of the Pharaohs by and for whom they were constructed, and the "processional statue" (ll. 25–39) of the king is still their principal cult-object; but at the same time they are become temples of the local god, and may fairly be said to have been built by the king "for his father" Amon or Ptah, as the case may be. Administratively, the funerary temples of the Theban period were dependent on the central temple of the place; thus for example the Ramesseum is called "the House of Millions of Years of Ramesse-miamun *in the estate of Amun*," and our inscription has an interesting allusion to this affiliation (l. 21).

A point of some importance may here be raised. Amenophis III was buried at Thebes, and his actual funerary temple was actually therefore at Thebes and not at Memphis. From the inscription of our statue however as well as from abundant other sources we have the best of reasons for believing that subsidiary funerary temples were erected at towns very far distant from the actual tomb. The question now arises, does the presence of a funerary temple in a place pre-suppose the existence of a cenotaph corresponding to it in the same place? In other words, is a cenotaph of Amenophis III to be sought somewhere in the Memphitic desert? To this question it is impossible at present to give an answer, but it may be pointed out that such cenotaphs are known, for it has been made pretty certain that the Osireion at Abydos was nothing else than a cenotaph of the kind.

We may pass over the description of the building

[1] This unusual phrase seems to mean: his needs and appetites shall not be satisfied.

of the temple "United with Ptah" (ll. 13–18). There is nothing to show whether the shrine was a large or a small one; Egyptian grandiloquence leaves no room for deductions on such points. In ll. 18–19 we are told that Amenophis III established a regular priesthood in the temple, and endowed it with estates and cattle, as well as a numerous *personnel* for the management of the same; and the whole foundation was placed under the control of the Royal Stewards (l. 21).

48. In the next lines the Chief Steward Amenhotep refers to a private foundation of his own (ll. 22–24). Out of the possessions which he had received as a reward from the Pharaoh he set aside a considerable area of land, together with its serfs and stock, to provide offerings for the statue of his Royal master in "United with Ptah." Later on we learn that this endowment was not inspired solely by motives of gratitude or reverence (ll. 25 foll.), but was part of a bargain according to which Pharaoh undertook to give Amenhotep the benefit of certain daily offerings previously laid before his own statue, after these same offerings had still earlier been placed before the image of the god Ptah. We have thus a quite complicated transaction to deal with here. Pharaoh has rewarded Amenhotep with lands, and in return Amenhotep institutes offerings for the statue of Pharaoh. Before the statue of Pharaoh can enjoy them however, they have to pass before the image of Ptah, who first of all "sates himself with them." Next, the statue of Pharaoh makes a meal of them; and finally, by compact with the Pharaoh, they are handed to the lector-priest who attends to Amenhotep's funerary cult to be laid before Amenhotep's statue in his tomb. The ultimate beneficiary was "the lector-priest in Amenhotep's estate" himself (ll. 26, 47), who was thus provided with his means of subsistence.

Agreements of a similar kind have long been known; those recorded in the tomb of Hep-zefi at Siut are the most familiar example. Nothing quite as intricate as the present instance has perhaps been found hitherto. That such agreements should have existed is based on the material fact that statues, whether of stone or of wood, of gods or of men, cannot actually consume the offerings that are placed before them; whence it follows that the same offerings may serve for the performance of several consecutive ceremonial sacrifices. On the spiritual side, there was also thought to be a special sanctity about food that had served the god for a meal; and the most familiar prayer of the Egyptian was that he might enjoy "offerings that had gone up on the altar of the great god," "after the god had been satisfied with his possessions." The practical difficulty was always as to the final human beneficiary. In the present case there were many persons who would have an interest in preventing the offerings in question from ever reaching Amenhotep's lector-priest. In the first place there were the Royal Stewards who administered the temple "United with Ptah," and then all the numerous hungry priests and temple-servants who attended to the needs of Ptah and of the statue of Amenophis III. The Royal Scribe Amenhotep had himself, evidently, no very sure confidence that the arrangement he had made would be carried out; for at the end of his inscription he uses the familiar device of blessing the observer of his wishes and cursing him who should transgress them, at the same time pleading that his virtue in life merited proper recognition after his death.

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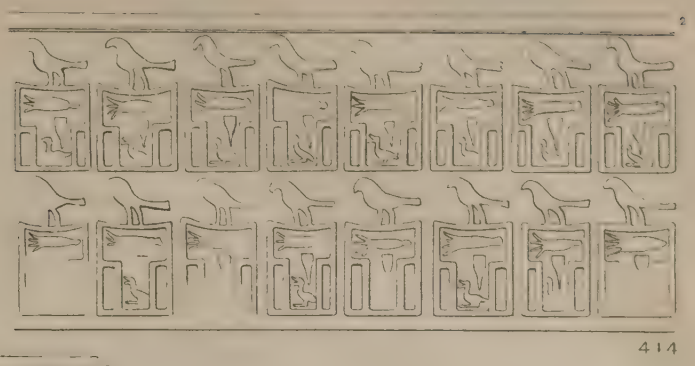
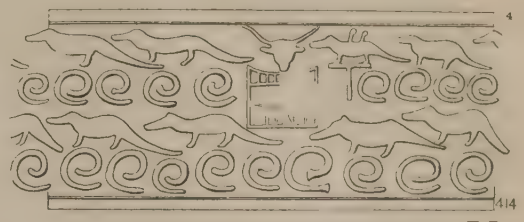
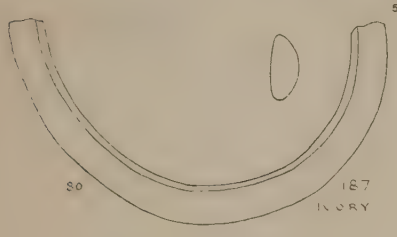
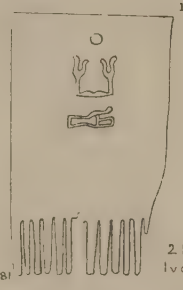
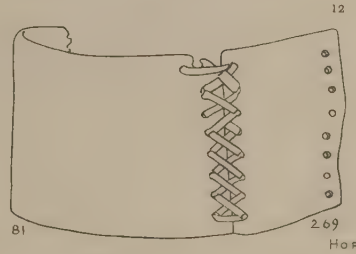
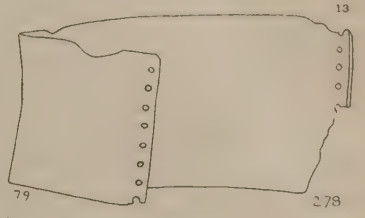


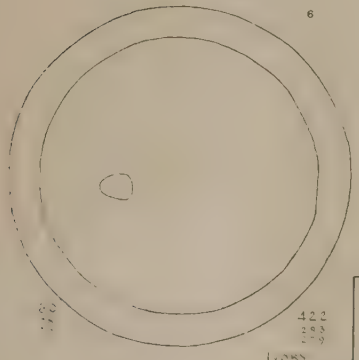


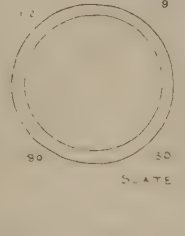


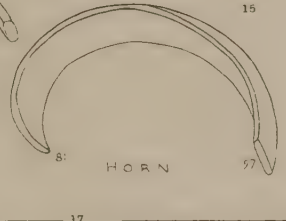


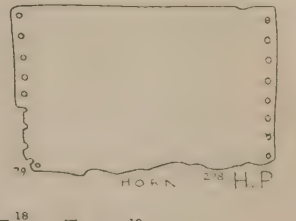


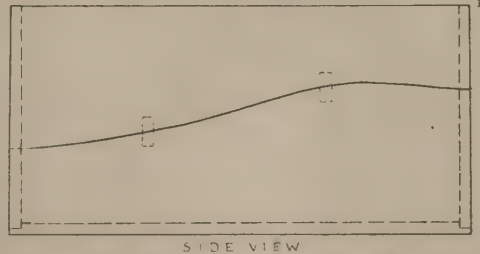


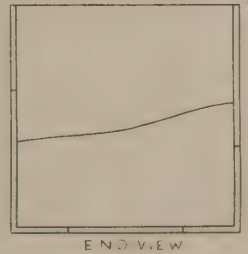




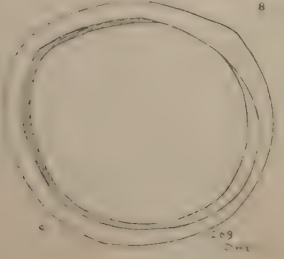


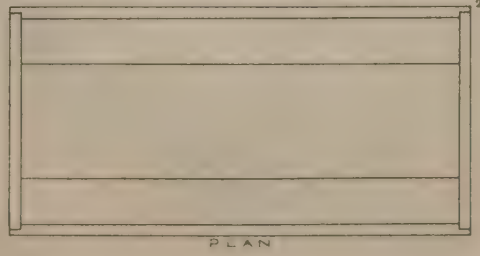


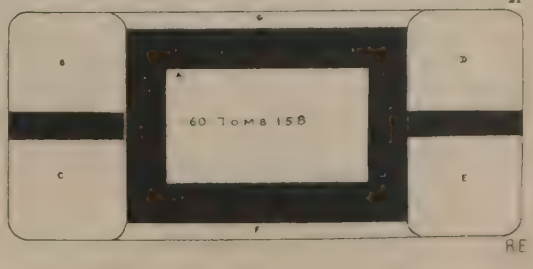




1.30 TYPE OF WOODEN COFFIN. 78-80







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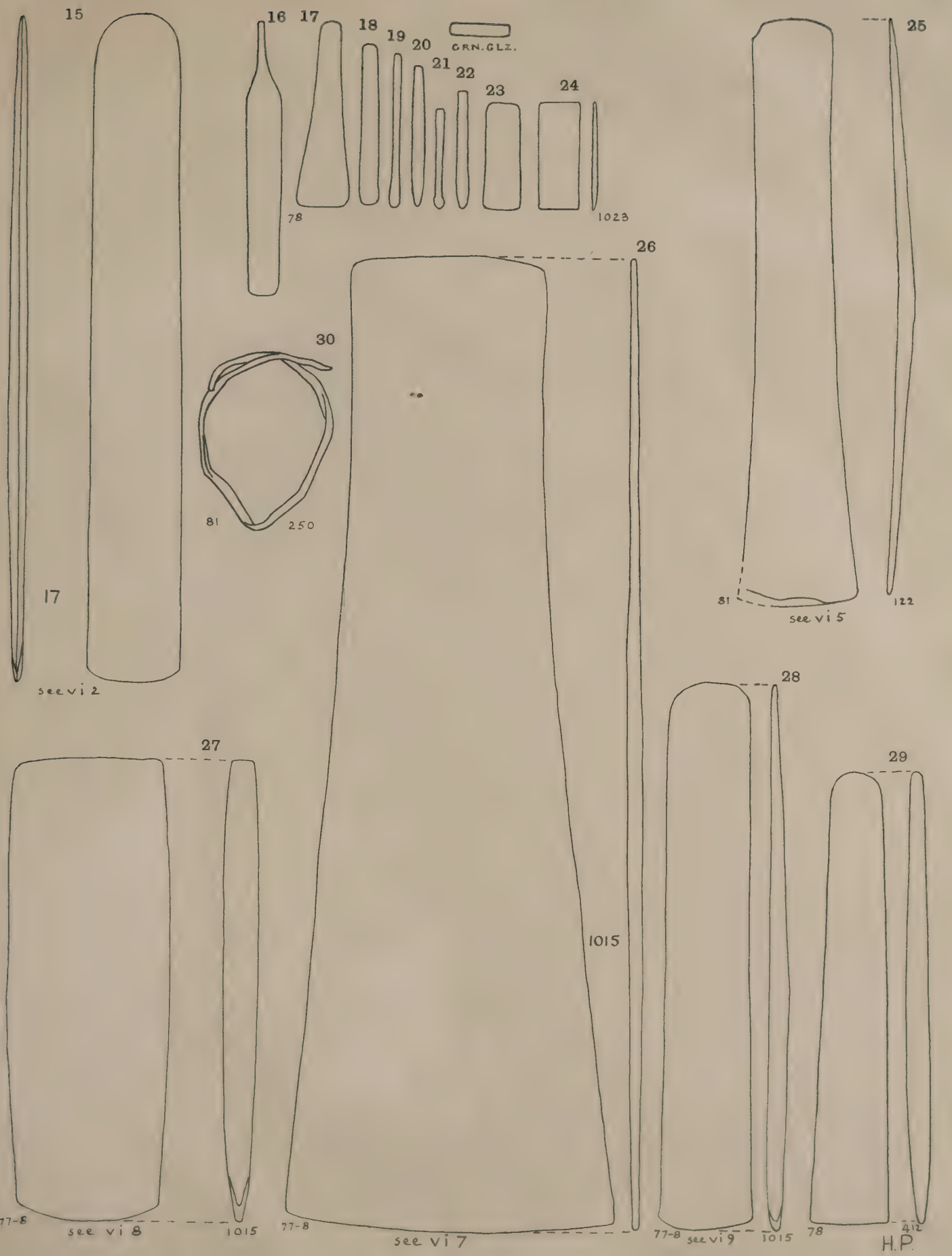
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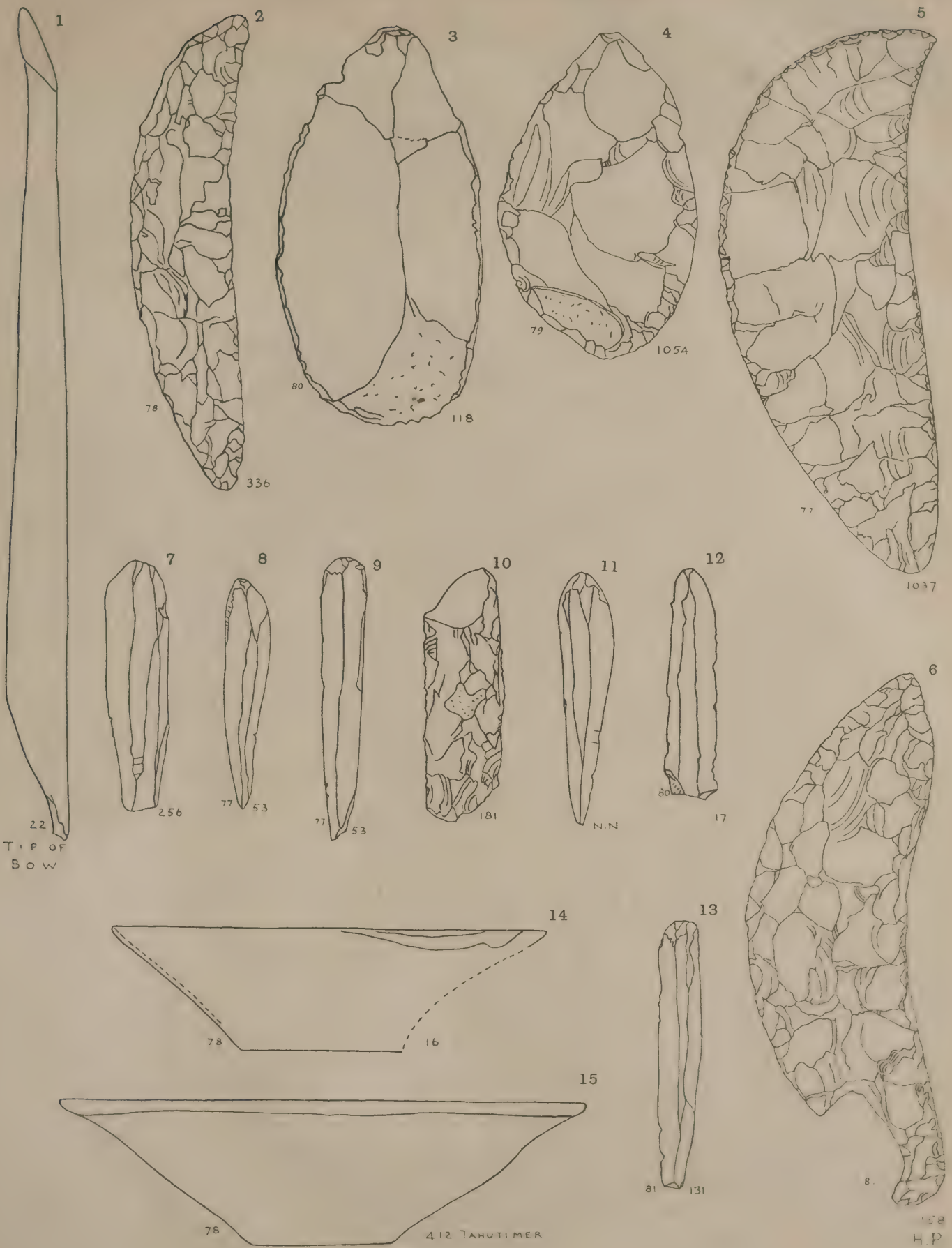
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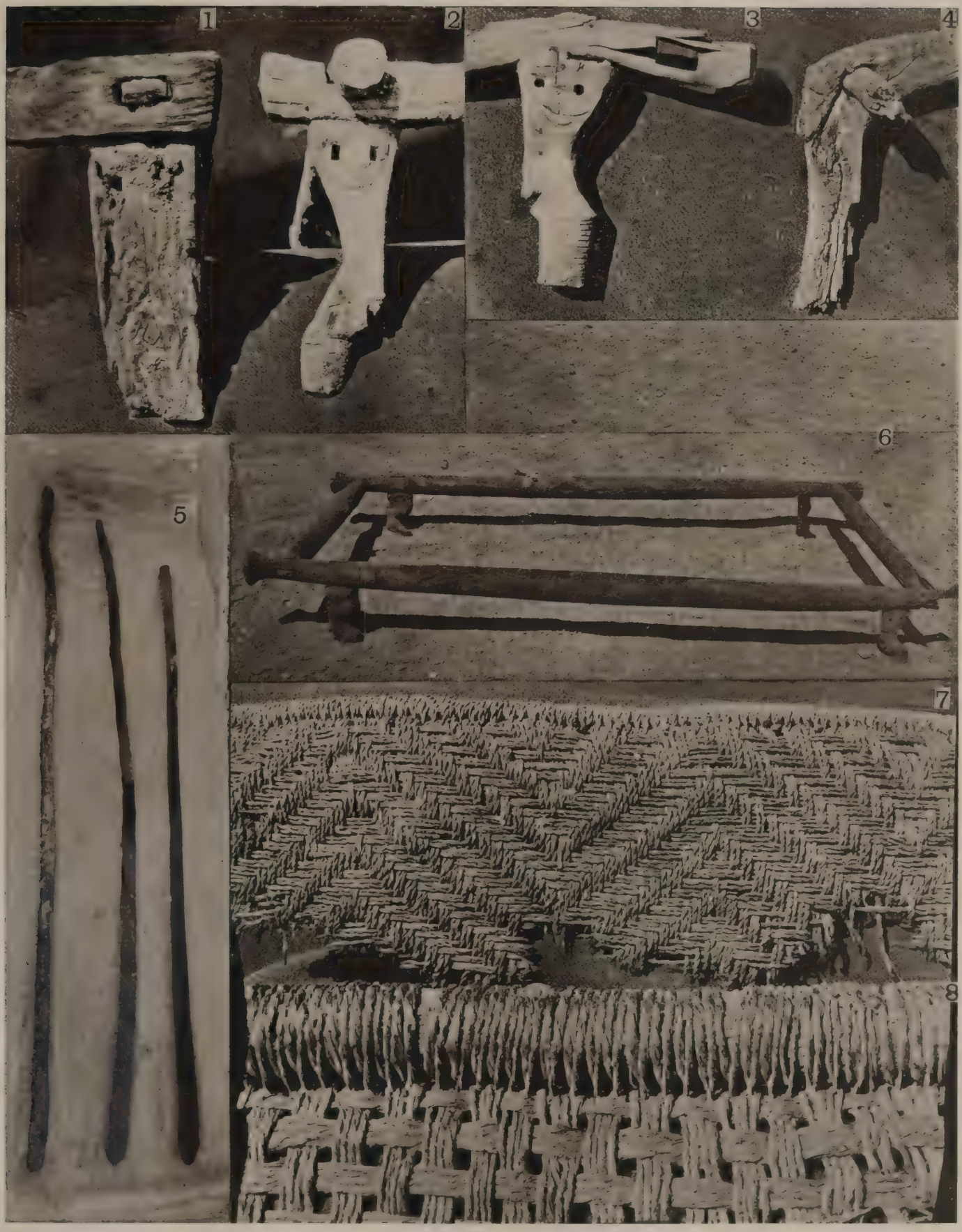
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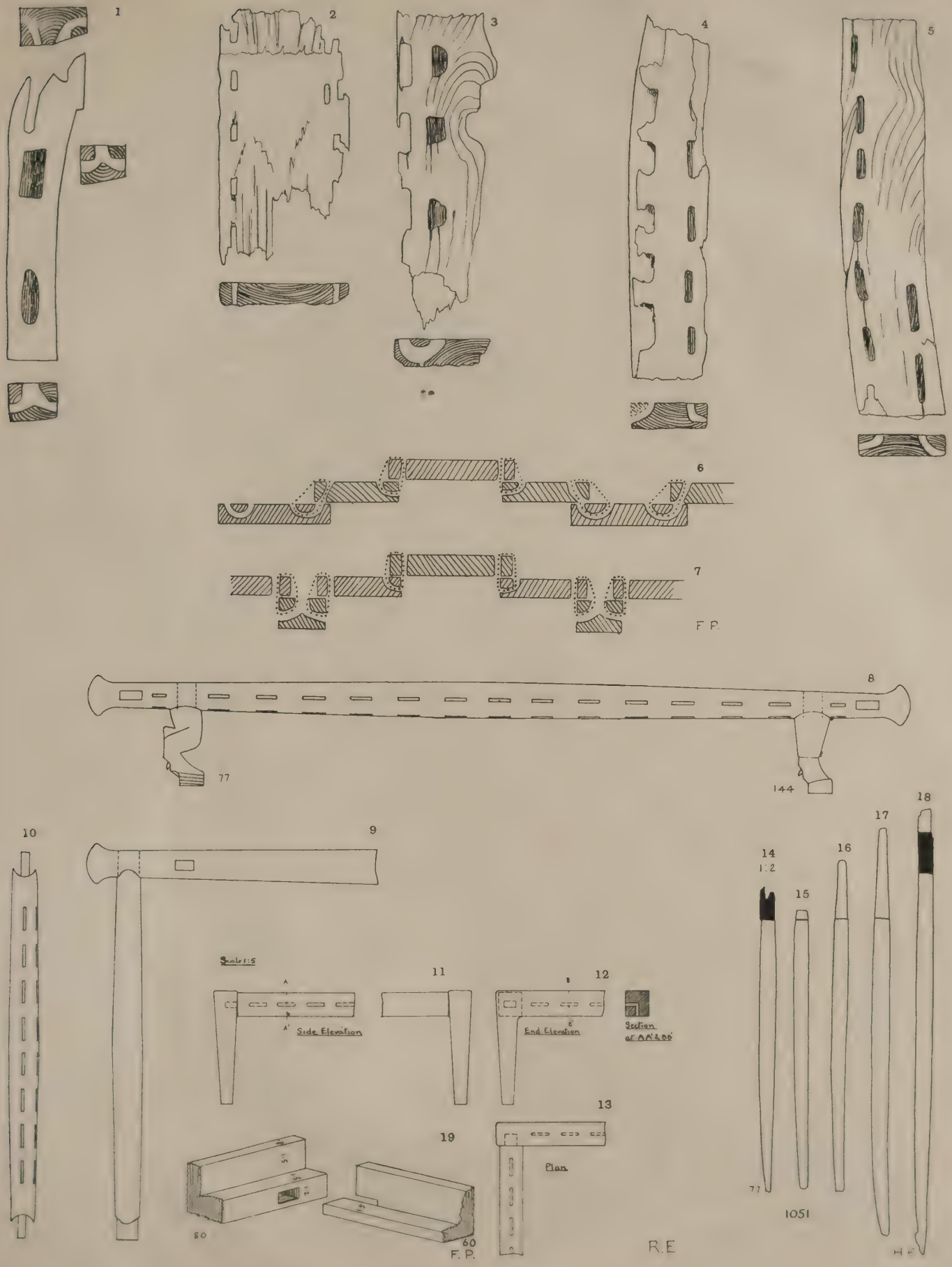
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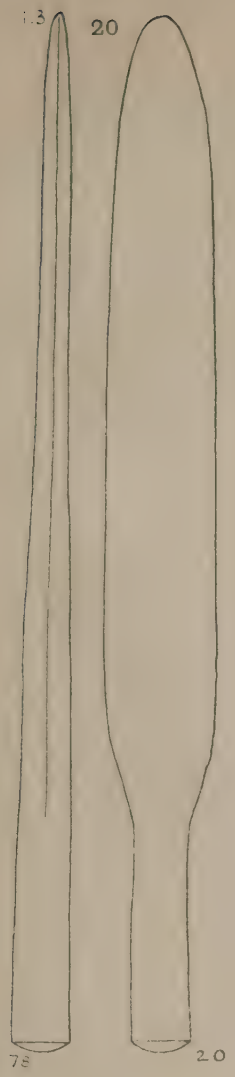
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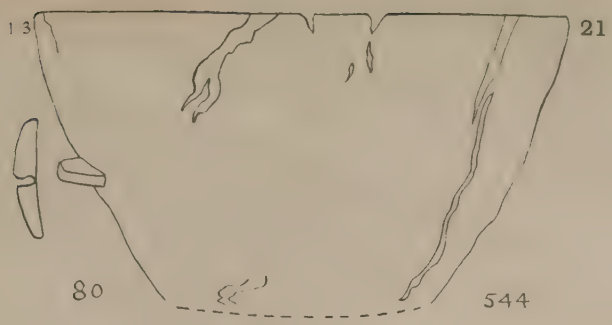
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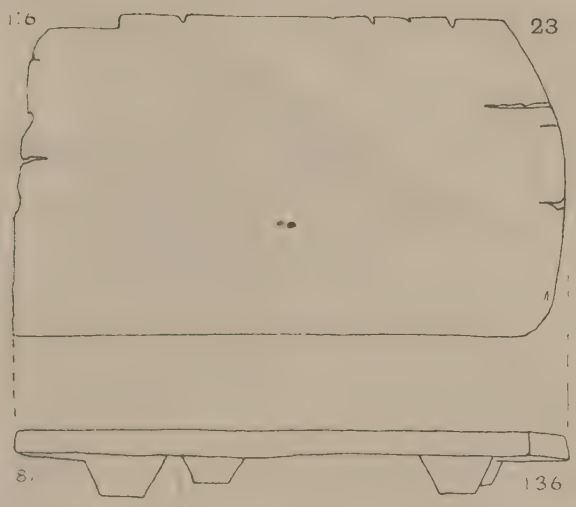
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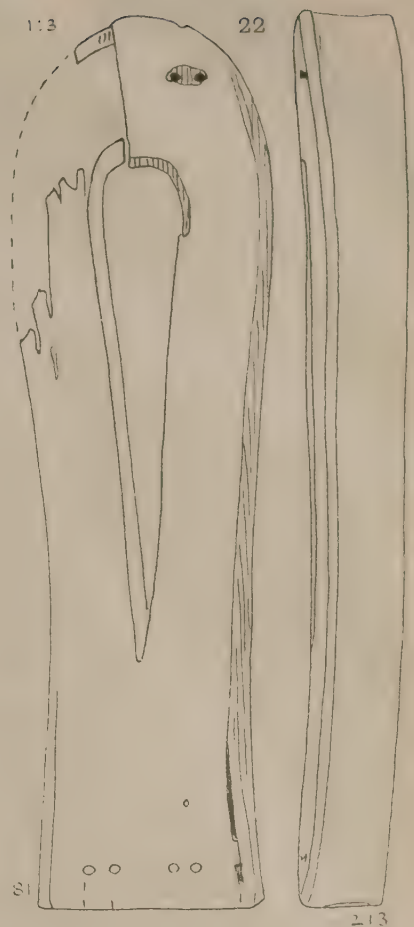
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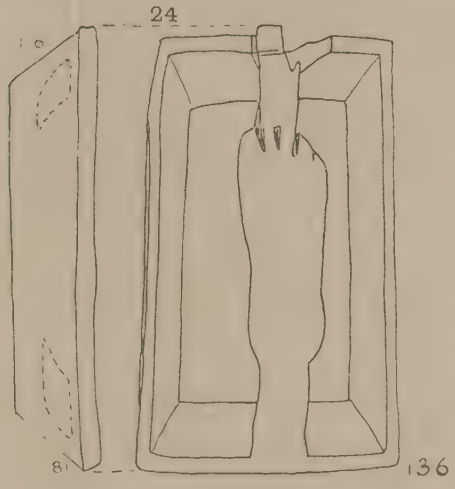
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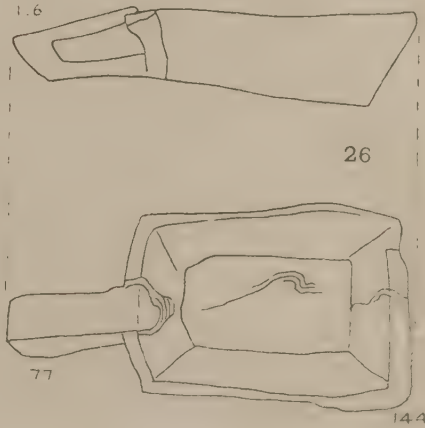
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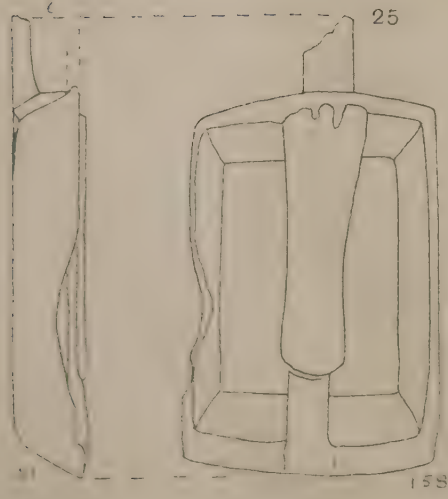
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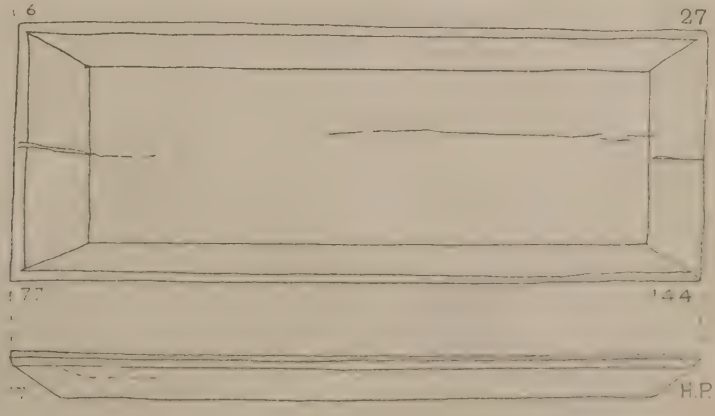
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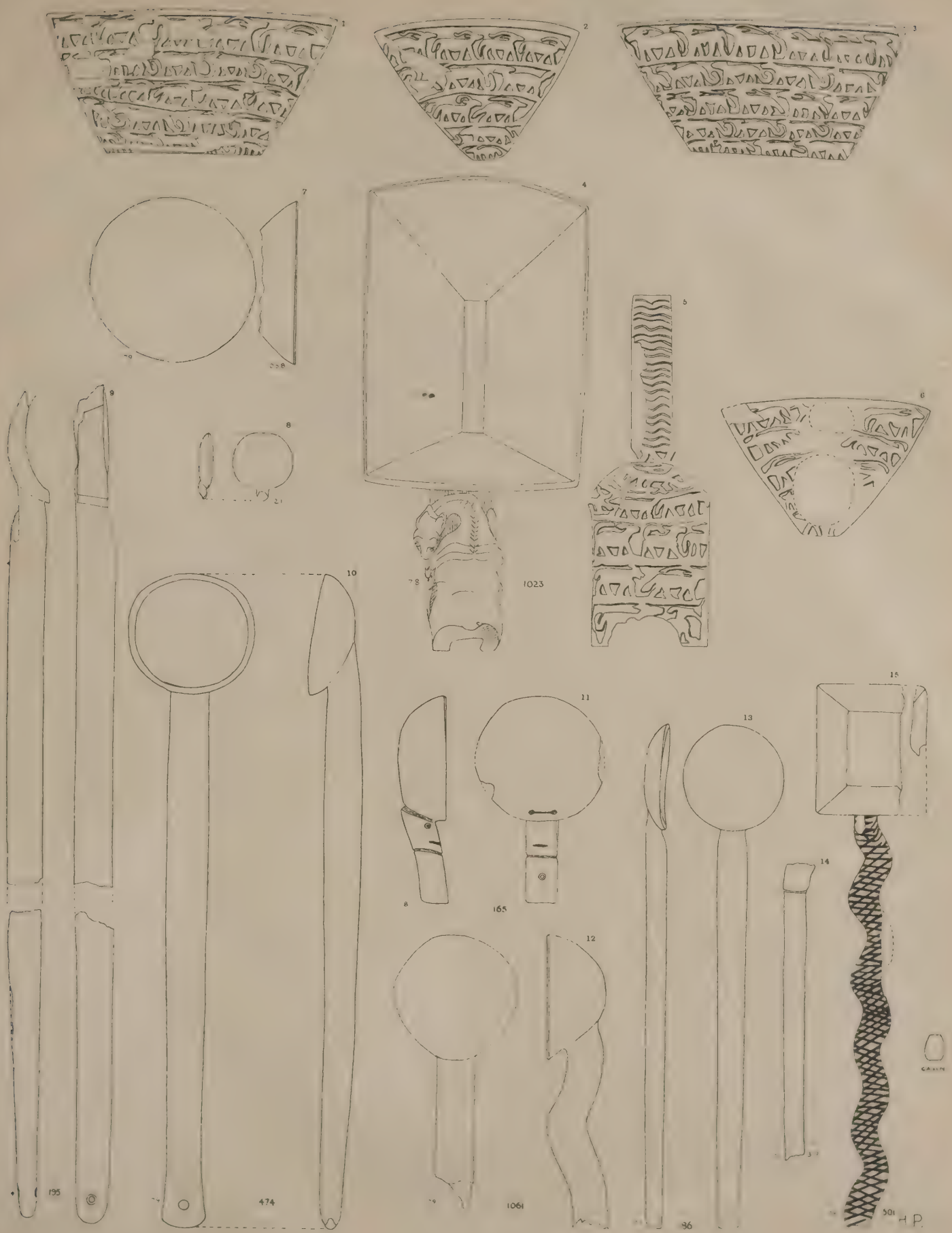
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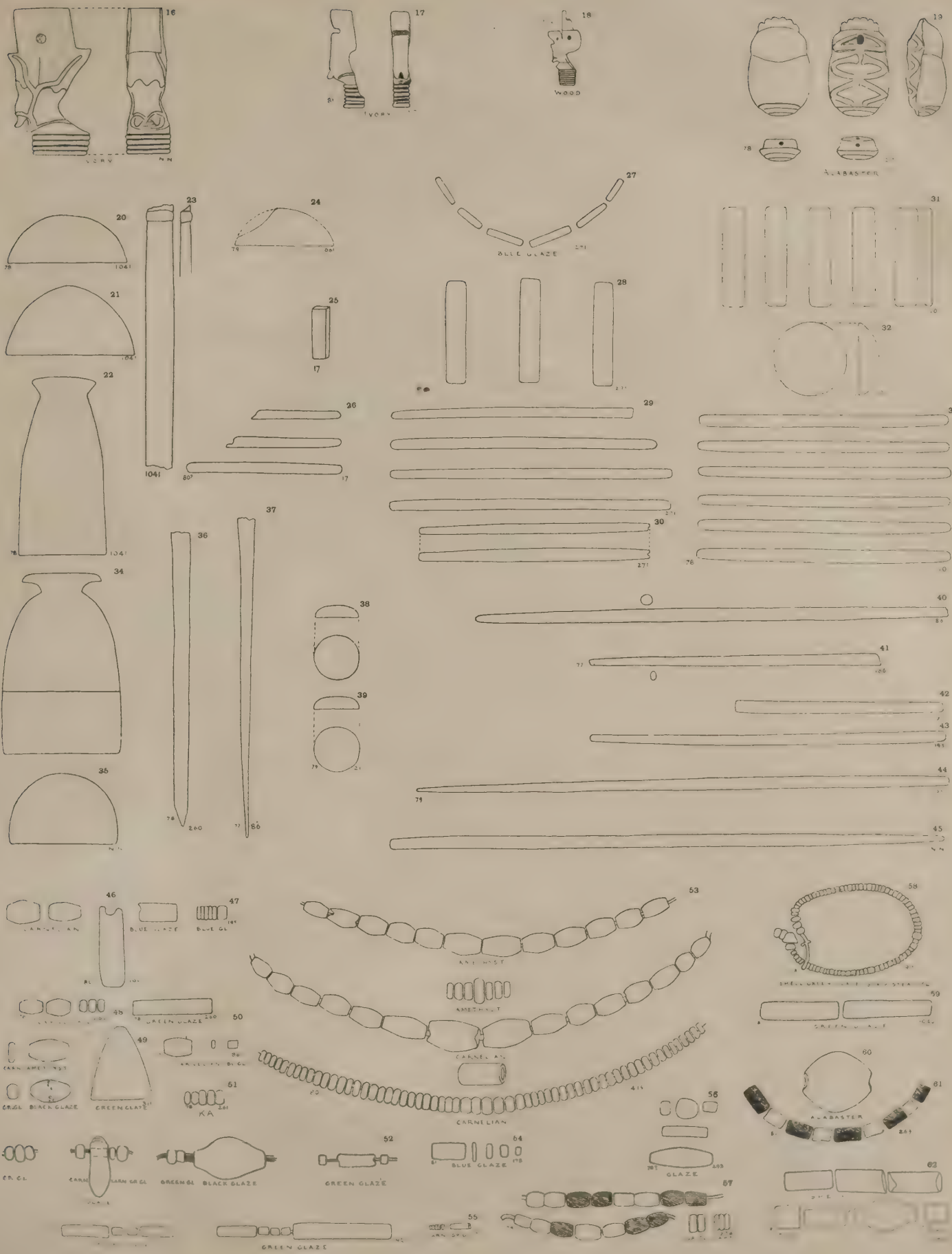
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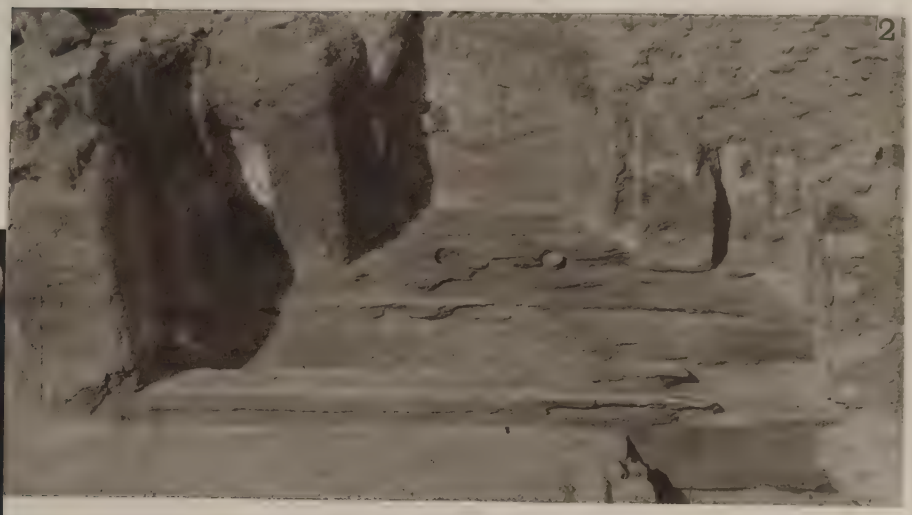
ALABASTER VASES. 1:4.

EASTERN FACE OF MASTABA.



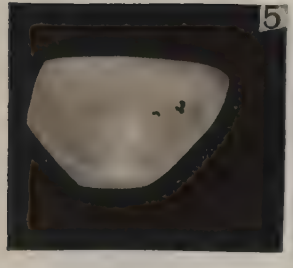
WOODEN FLOOR OF RECESS.

ALABASTER VASES. 1:4.

GROUP OF STONE VESSELS, ETC.

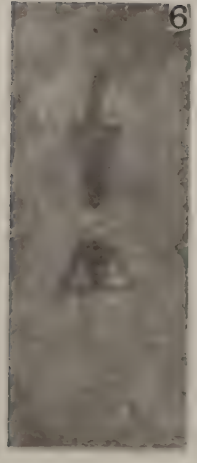
FOREIGN POTTERY. 1:2.

NORTH WALL OF CENTRAL CHAMBER.

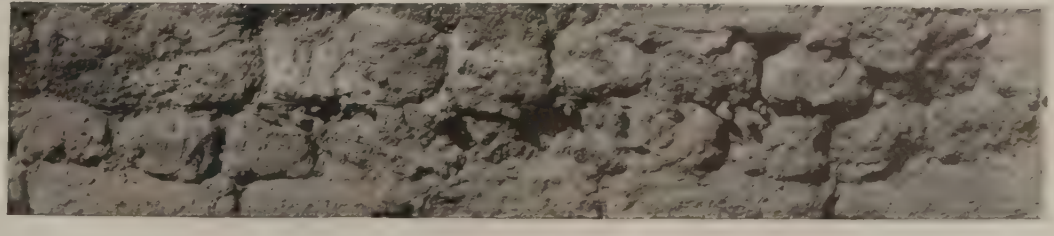


QUARTZ BOWL. 1:2.

NORTH PAIR OF CHAMBERS OF OFFERINGS.

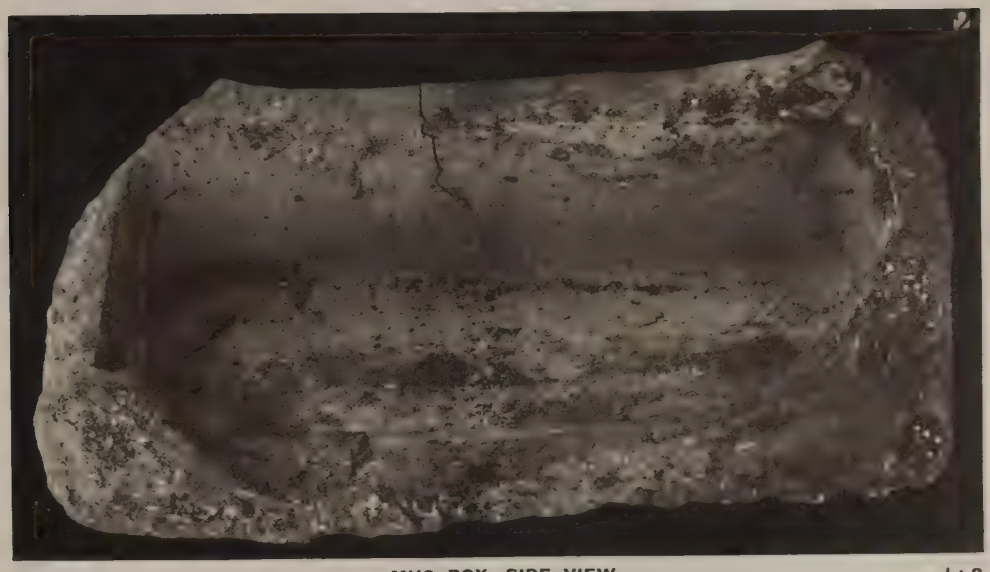


INK GRAFFITO. 1:1.

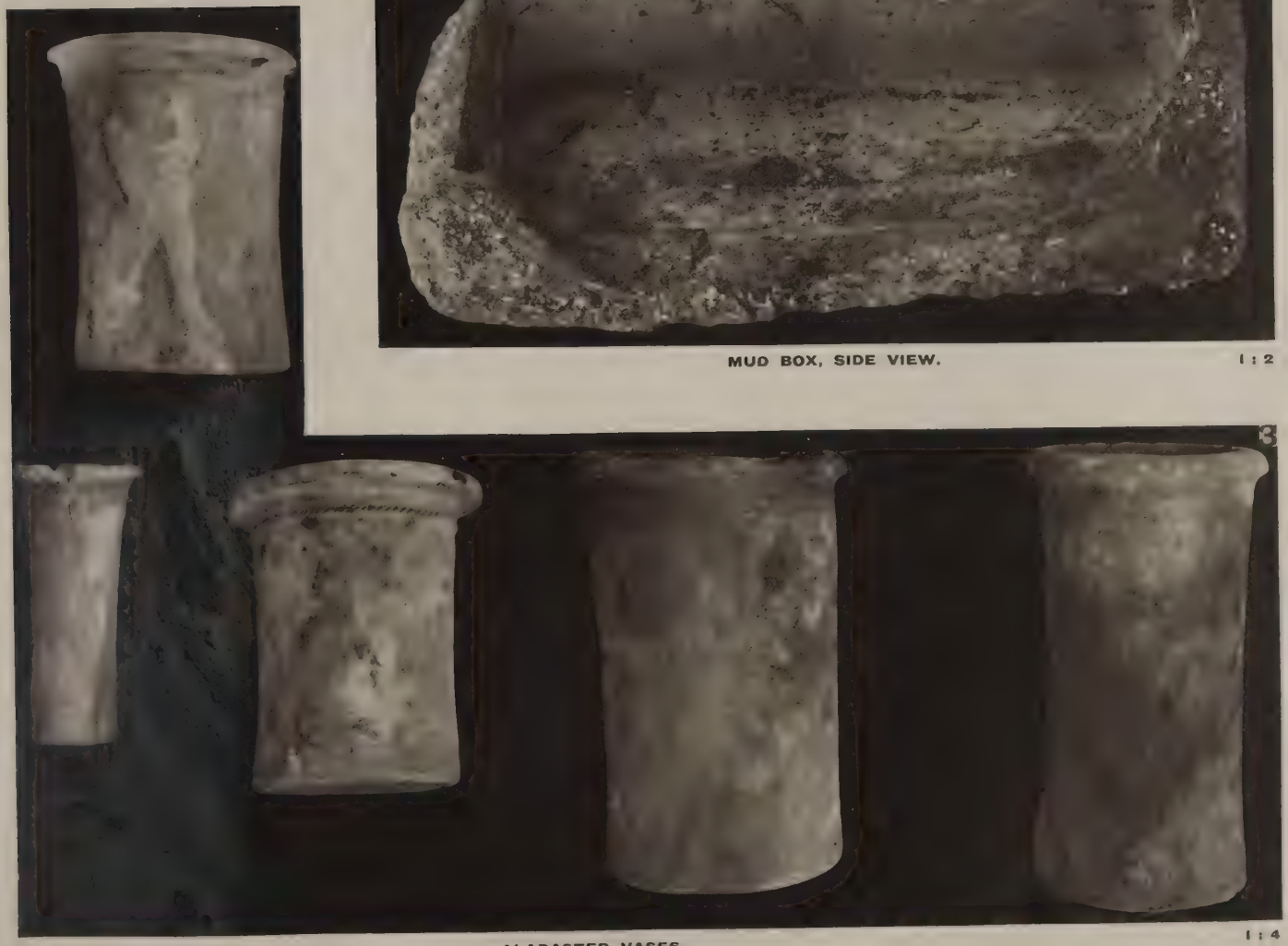


BONDING COURSE OF STICKS.

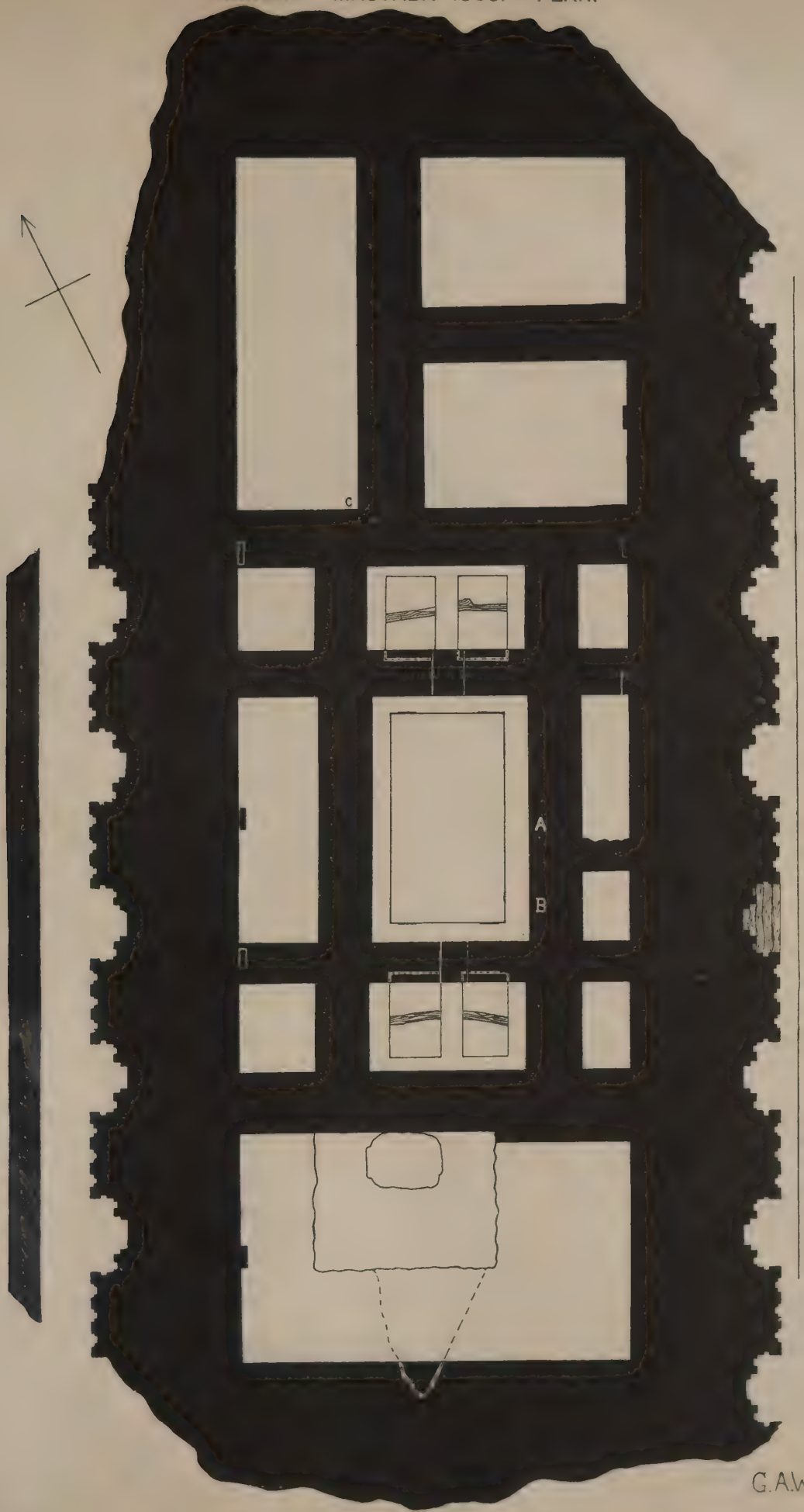
MUD BOX, BOTTOM. 1 : 2



MUD BOX, SIDE VIEW. 1 : 2



ALABASTER VASES. 1 : 4



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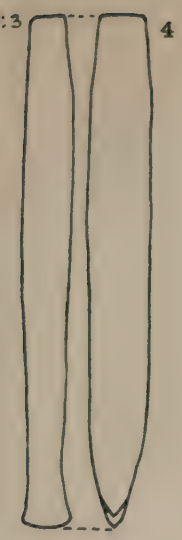
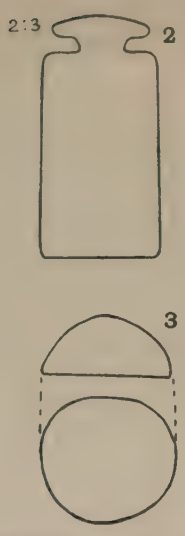
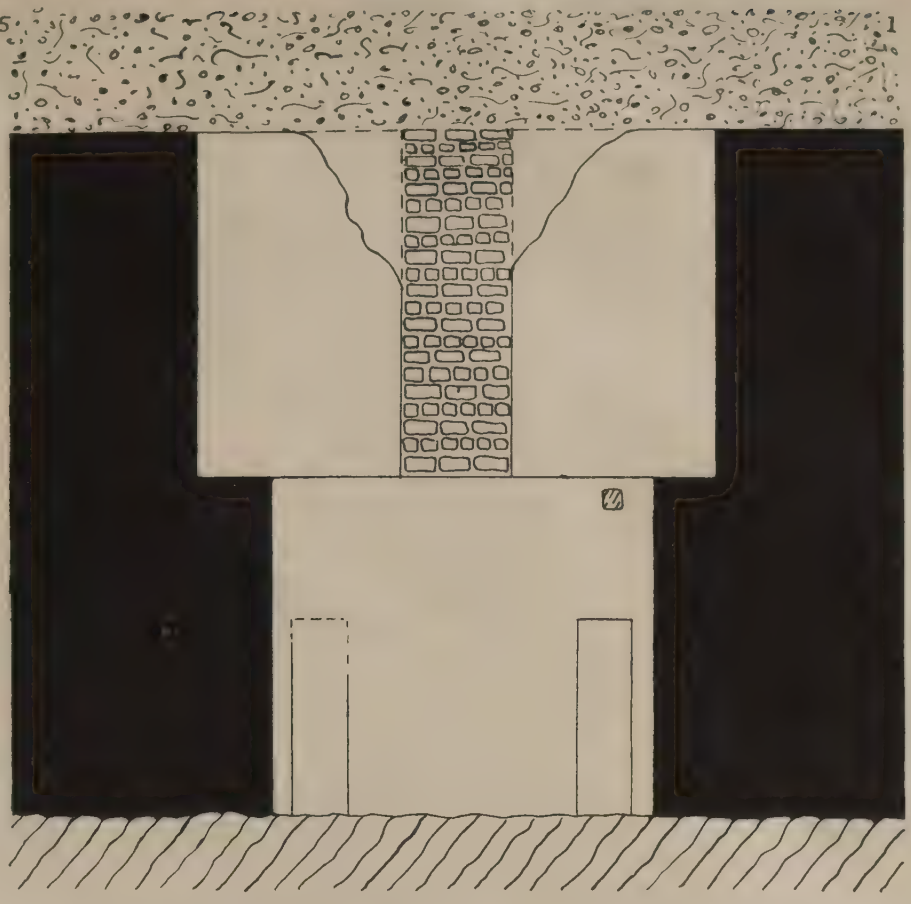


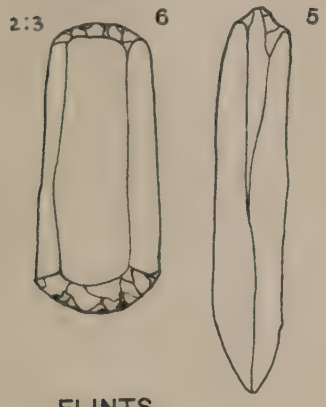
COPPER CHISEL



IVORY DRAUGHTSMEN

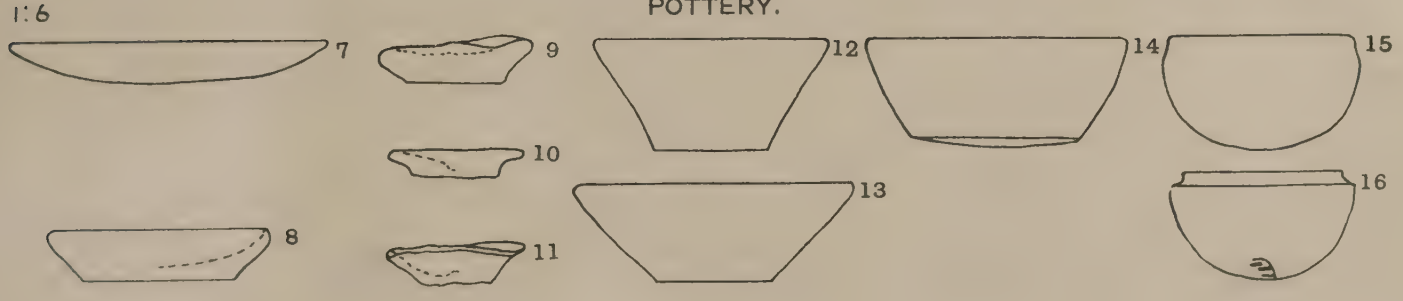


EAST TO WEST SECTION OF CENTRAL CHAMBER.

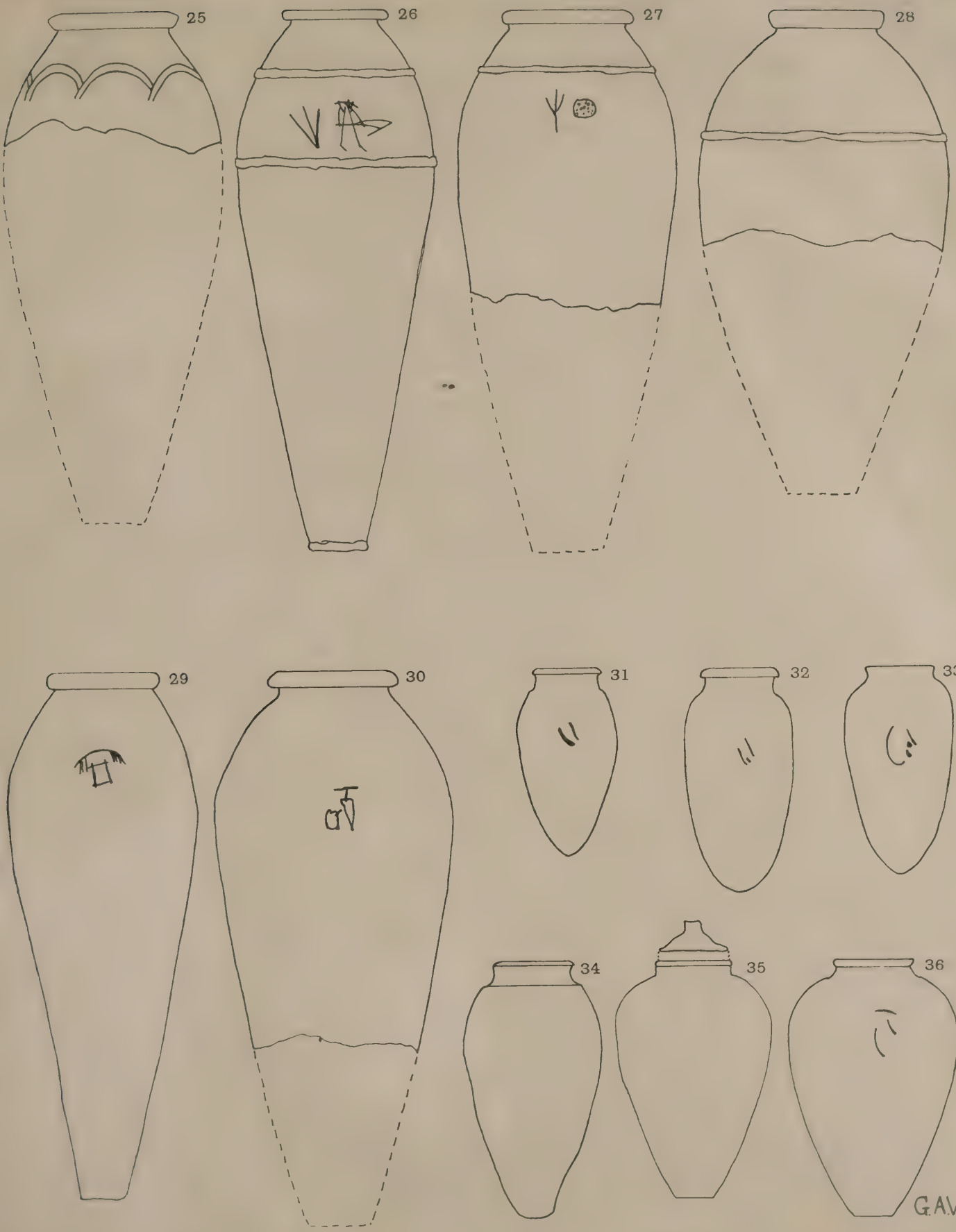


FLINTS.

POTTERY.



G.A.W.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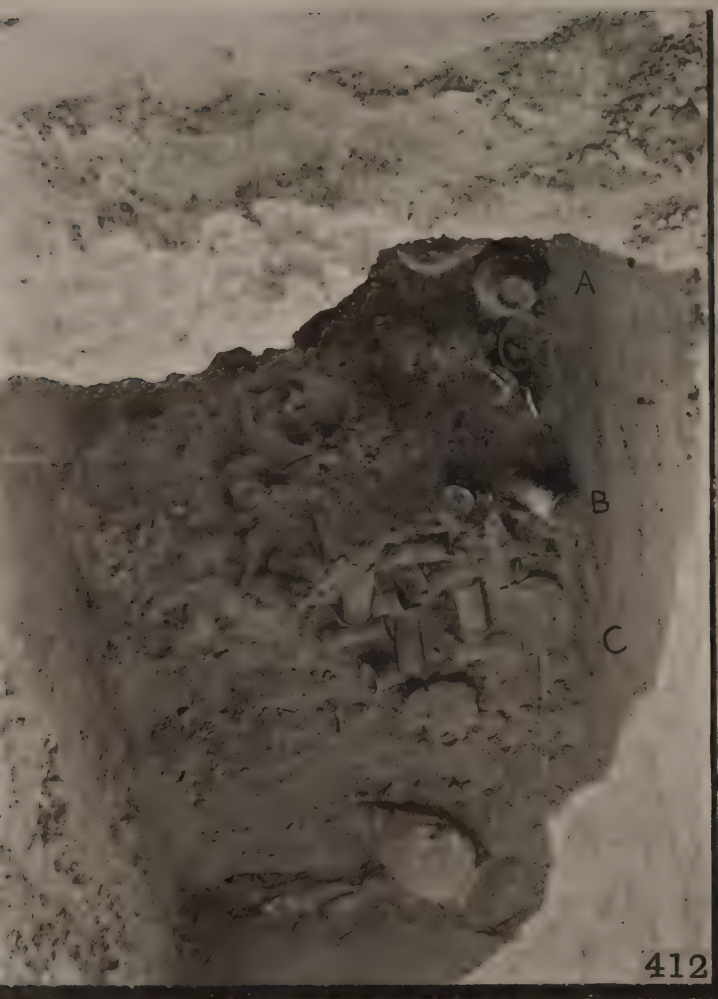
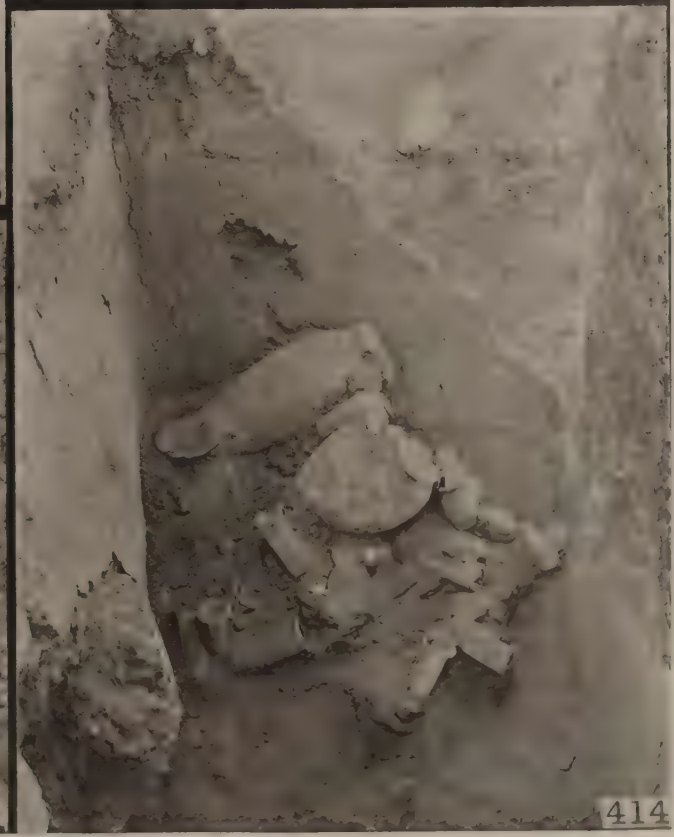
G.A.W.


A
B
C
412

A
B
C
412

261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1007

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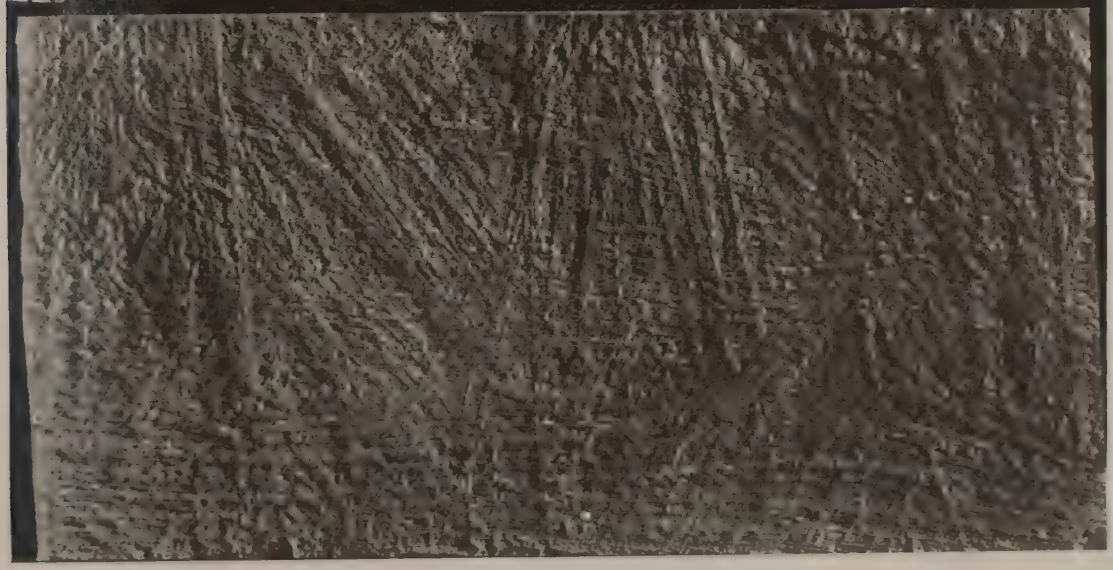
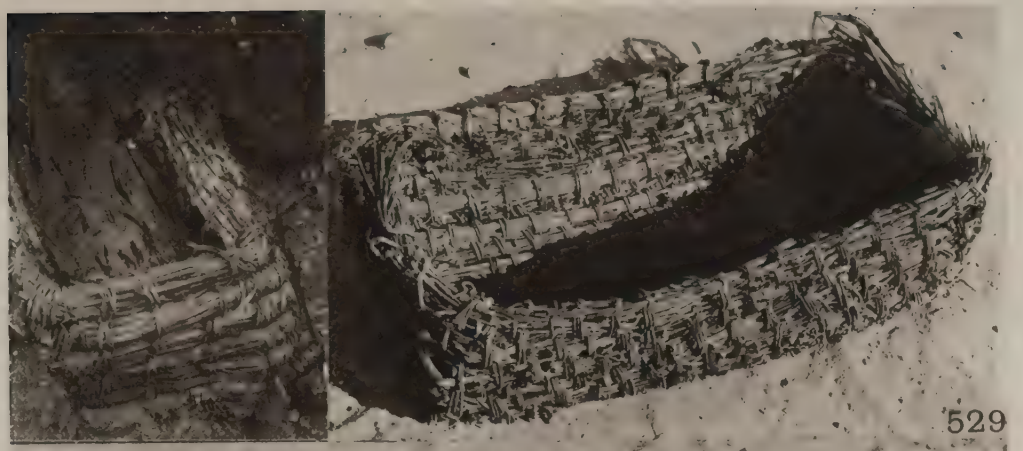


WITH ENTRANCE BRICKED UP.

BRICKING REMOVED SHOWING COFFIN.

REED COFFIN STILL TIED UP.

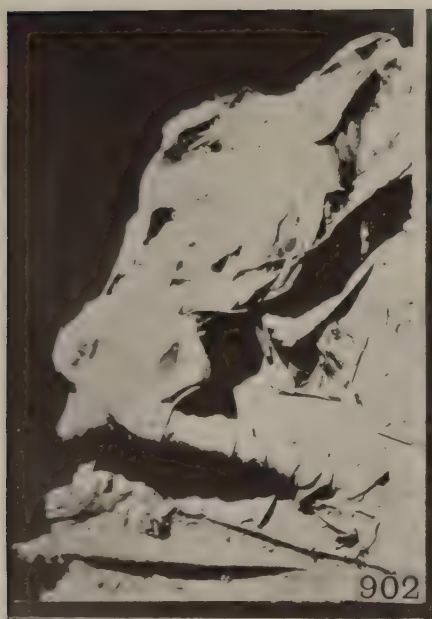
COFFIN OPENED, CONTRACTED BURIAL WITH HEADREST.



529

1004

1004

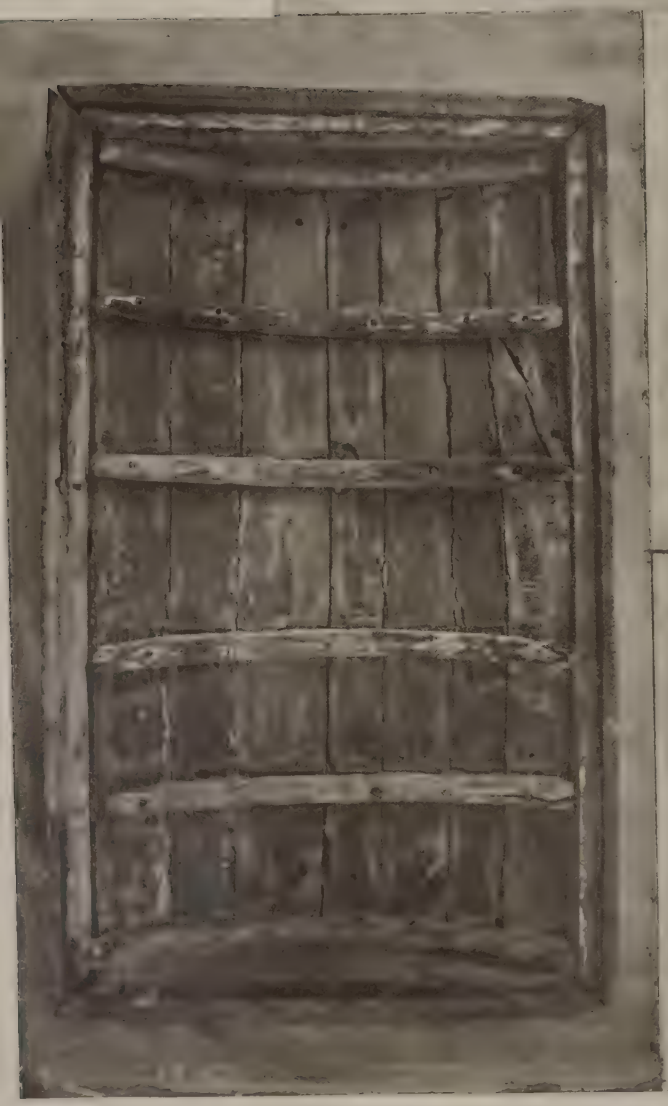

902

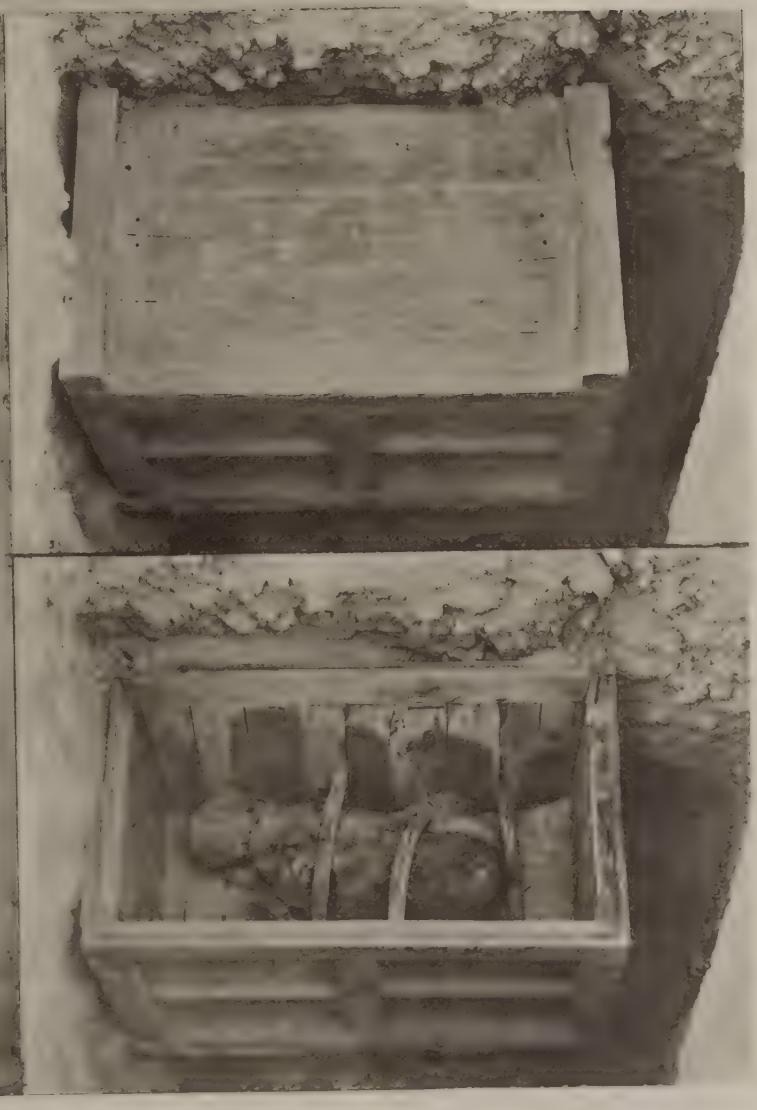
217

208

234

286





1
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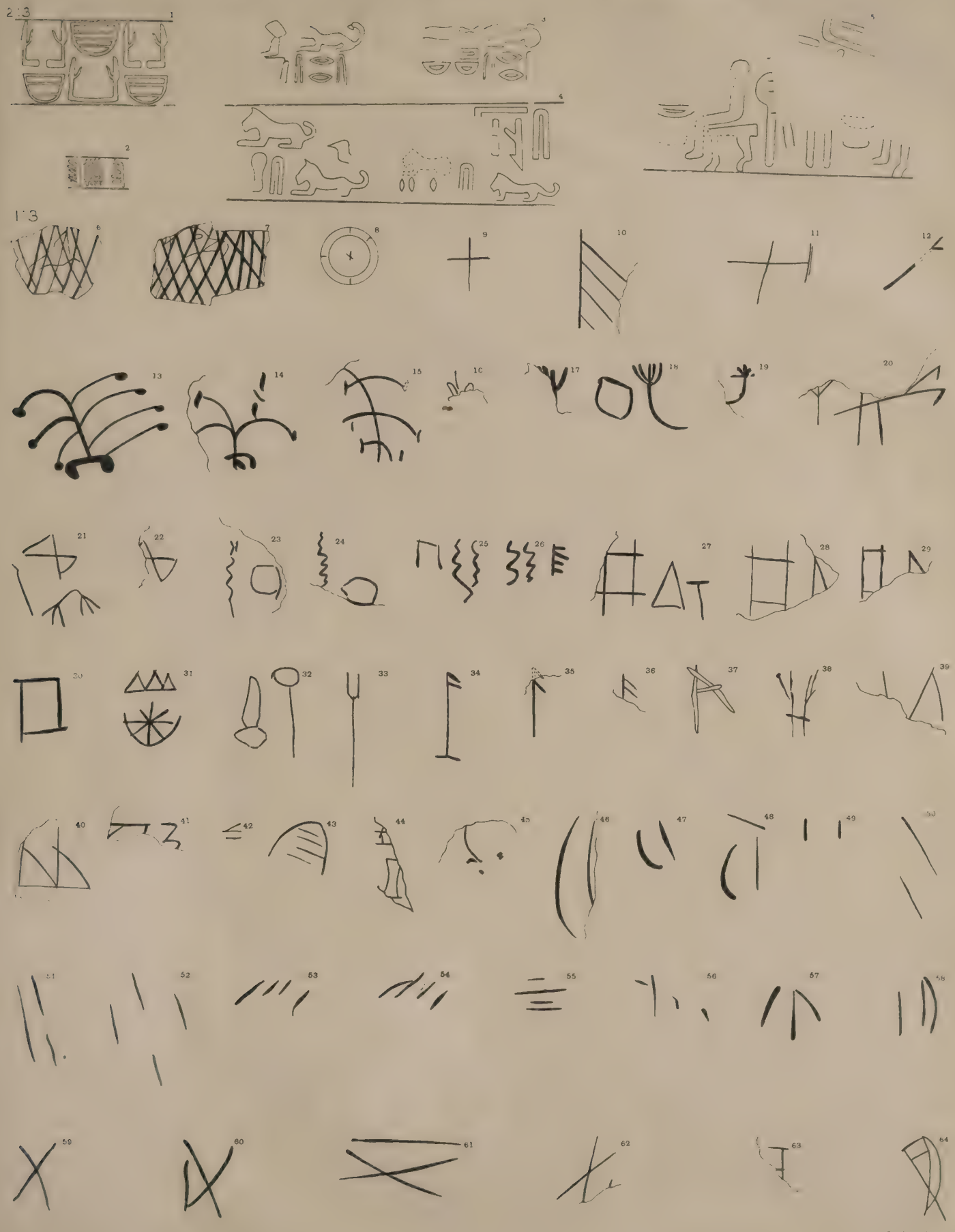
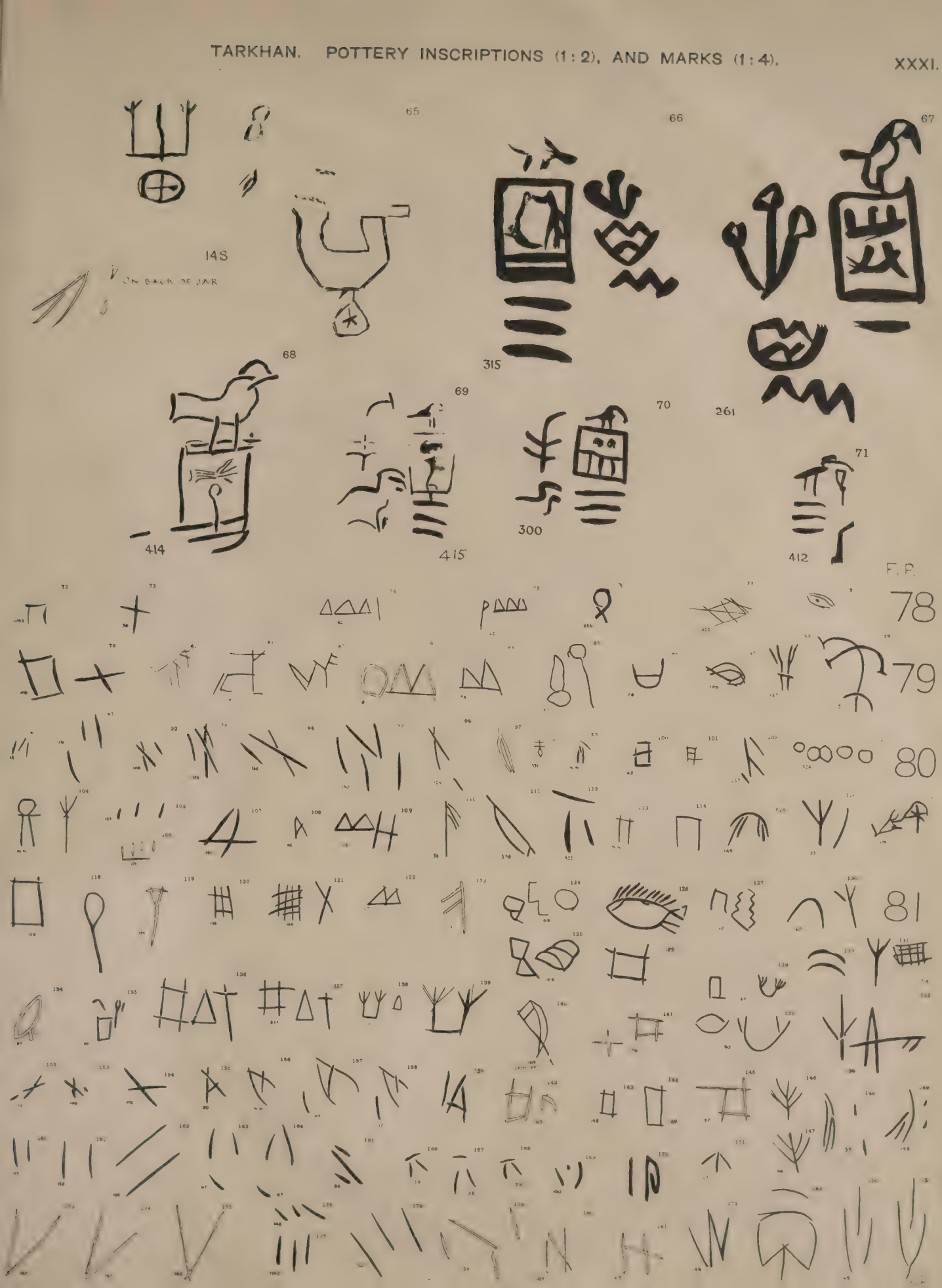


G.A.W.


65
66
67
148
ON BACK OF JAR
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68
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261
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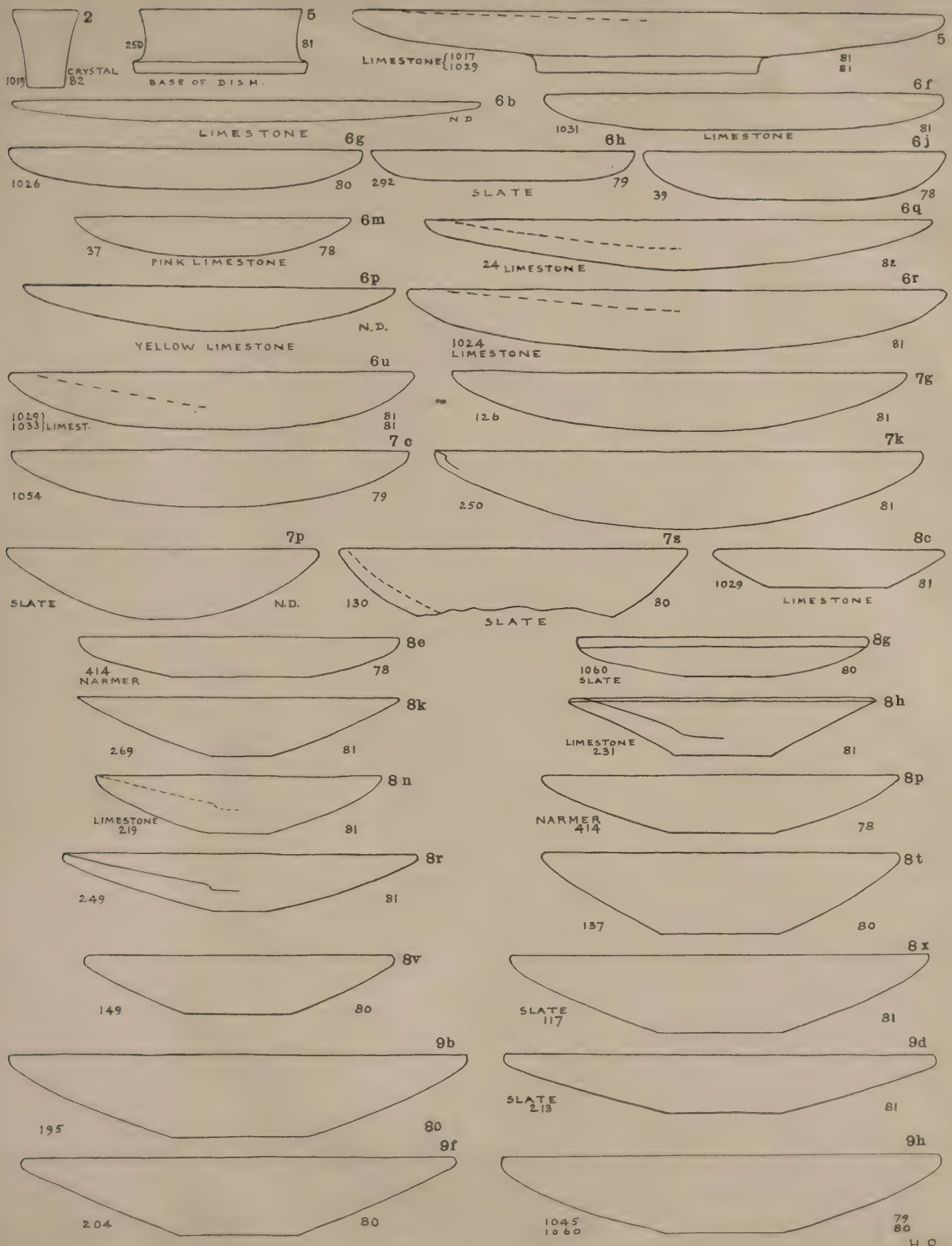
415
300
412
F. P.
78
79
80
81


2
1019
CRYSTAL
82
5
250
81
BASE OF DISH.
5
LIMESTONE 1017 1029
81
81
6b
LIMESTONE
N.D.
6f
1031
LIMESTONE
81
6g
1026
80
6h
292
SLATE
79
6j
39
78
6m
37
PINK LIMESTONE
78
6q
24 LIMESTONE
82
6p
N.D.
YELLOW LIMESTONE
6r
1024
LIMESTONE
81
6u
1029 1033 LIMEST.
81
81
7g
126
81
7c
1054
79
7k
250
81
7p
SLATE
N.D.
7s
130
80
SLATE
8c
1029
81
LIMESTONE
8e
414
NARMER
78
8g
1060
SLATE
80
8k
269
81
8h
LIMESTONE
231
81
8n
LIMESTONE
219
81
8p
NARMER
414
78
8r
249
81
8t
137
80
8v
149
80
8x
SLATE
117
81
9b
195
80
9d
SLATE
213
81
9f
204
80
9h
1045
1060
79
80

H. P

9j
HARD LIMESTONE 1045
79
9p
143
80
SLATE
91
METAMORPHIC
ND
9o
ND
9n
512
81
9r
1060
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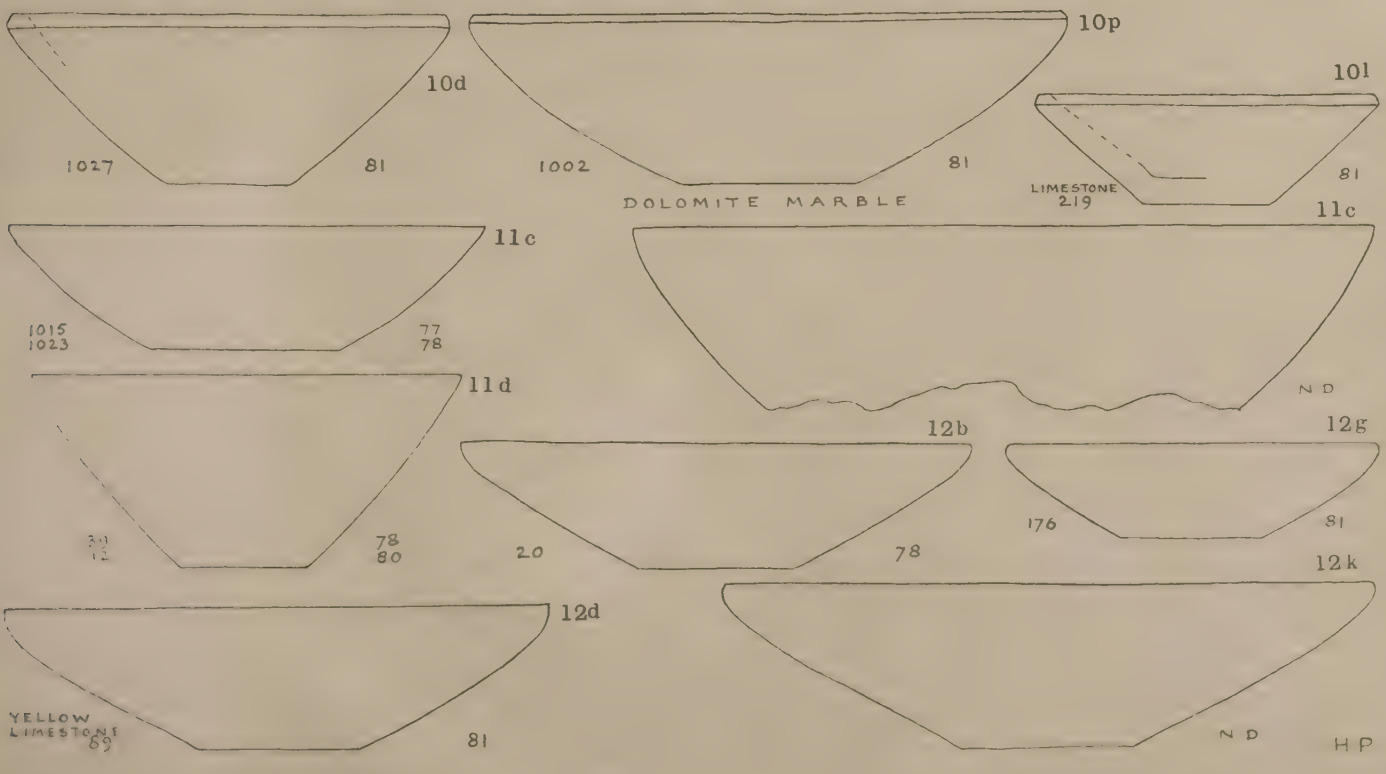
DISHES.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1027
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10p
1002
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DOLOMITE MARBLE
10l
LIMESTONE 219
81
11c
1015
1023
77
78
11c
ND
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12b
20
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176
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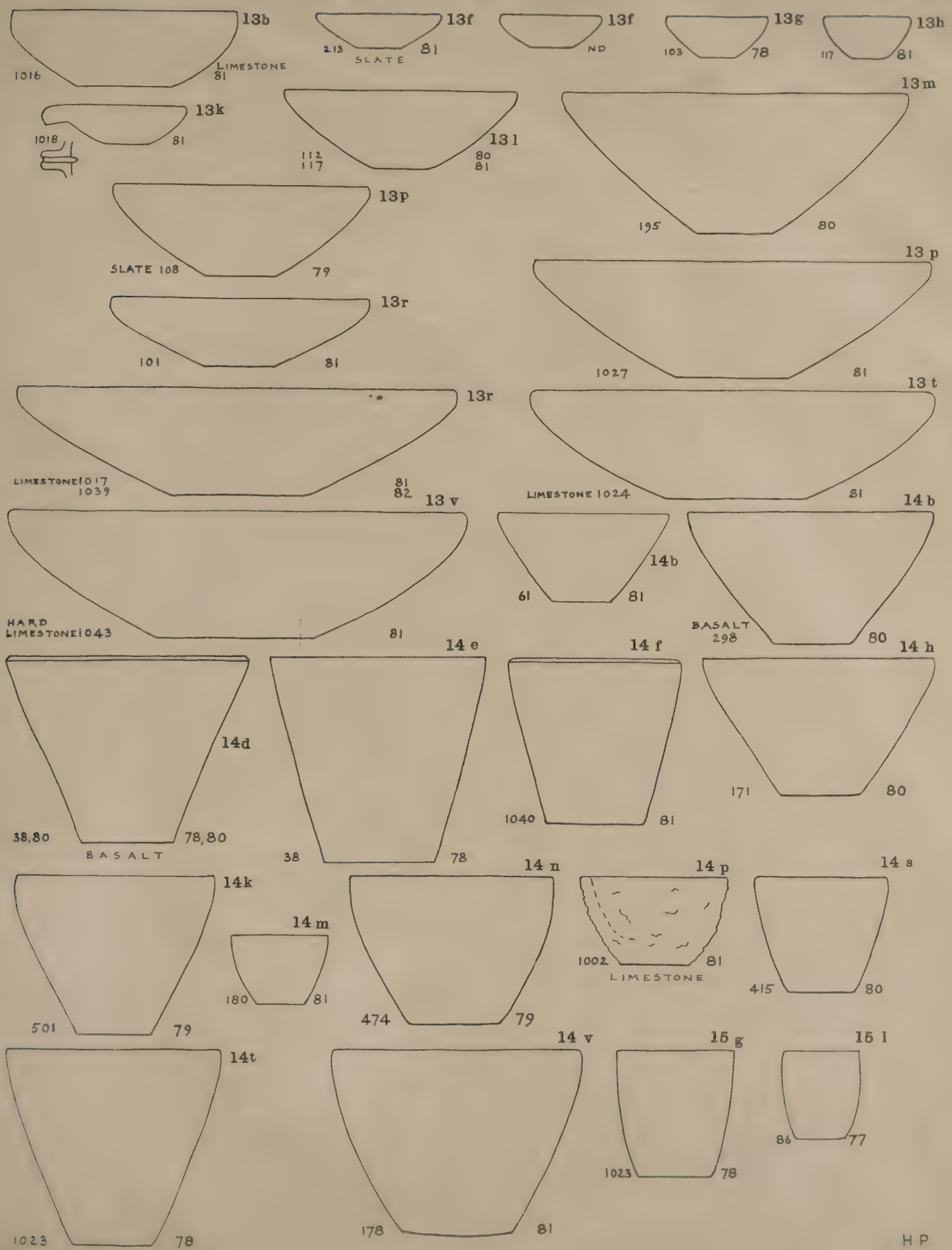
12d
YELLOW LIMESTONE
89
81
12k
ND
HP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1016
LIMESTONE
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13f
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SLATE
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13f
ND
13g
103
78
13h
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13k
1018
81
13l
112
117
80
81
13m
195
80
13p
SLATE 108
79
13 p
1027
81
13r
101
81
13r
LIMESTONE 1017
1039
81
82
13 t
LIMESTONE 1024
81
13 v
HARD
LIMESTONE 1043
81
14b
61
81
14 b
BASALT
298
80
14d
38,80
78,80
BASALT
14 e
38
78
14 f
1040
81
14 h
171
80
14k
501
79
14 m
180
81
14 n
474
79
14 p
1002
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15 l
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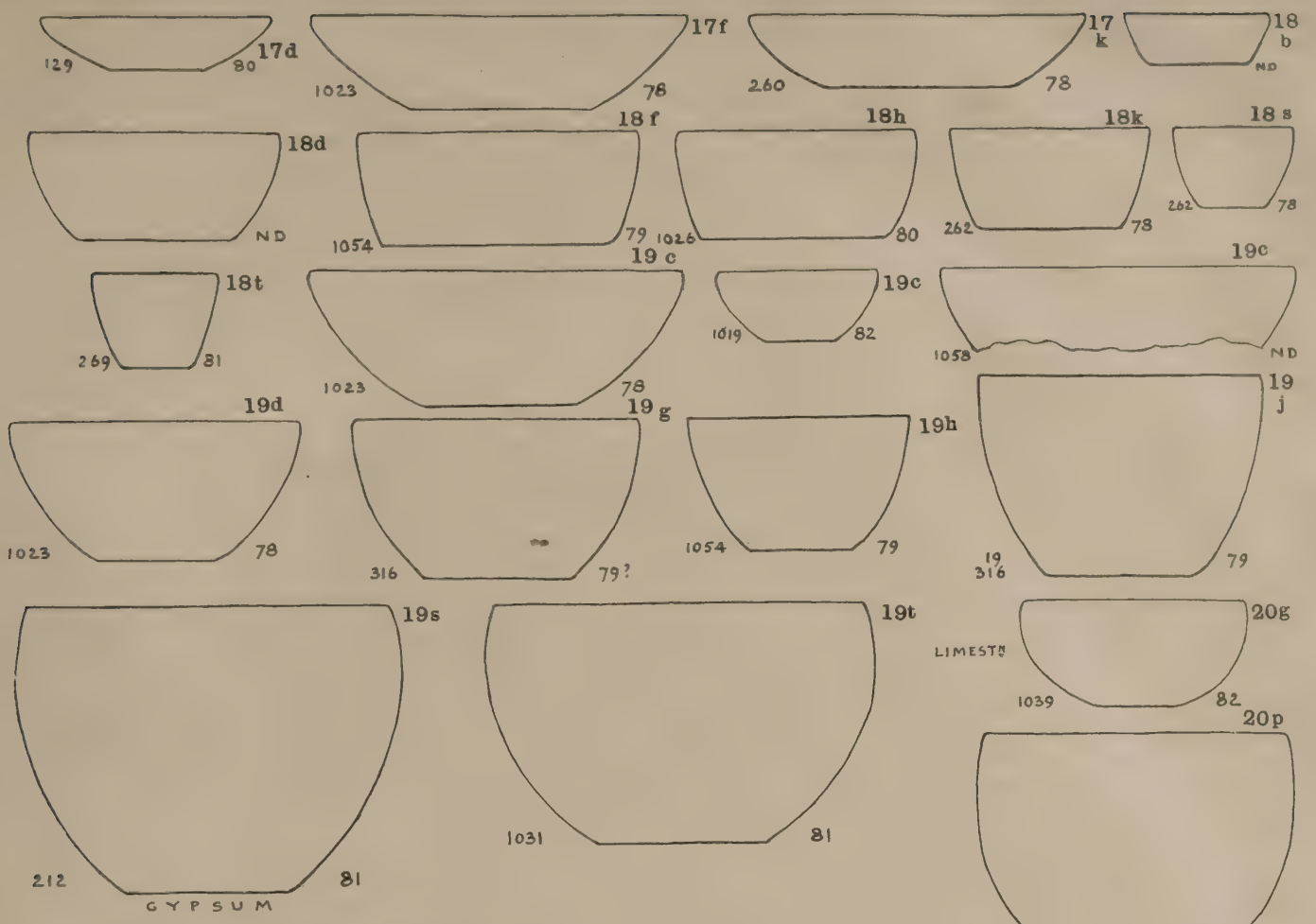
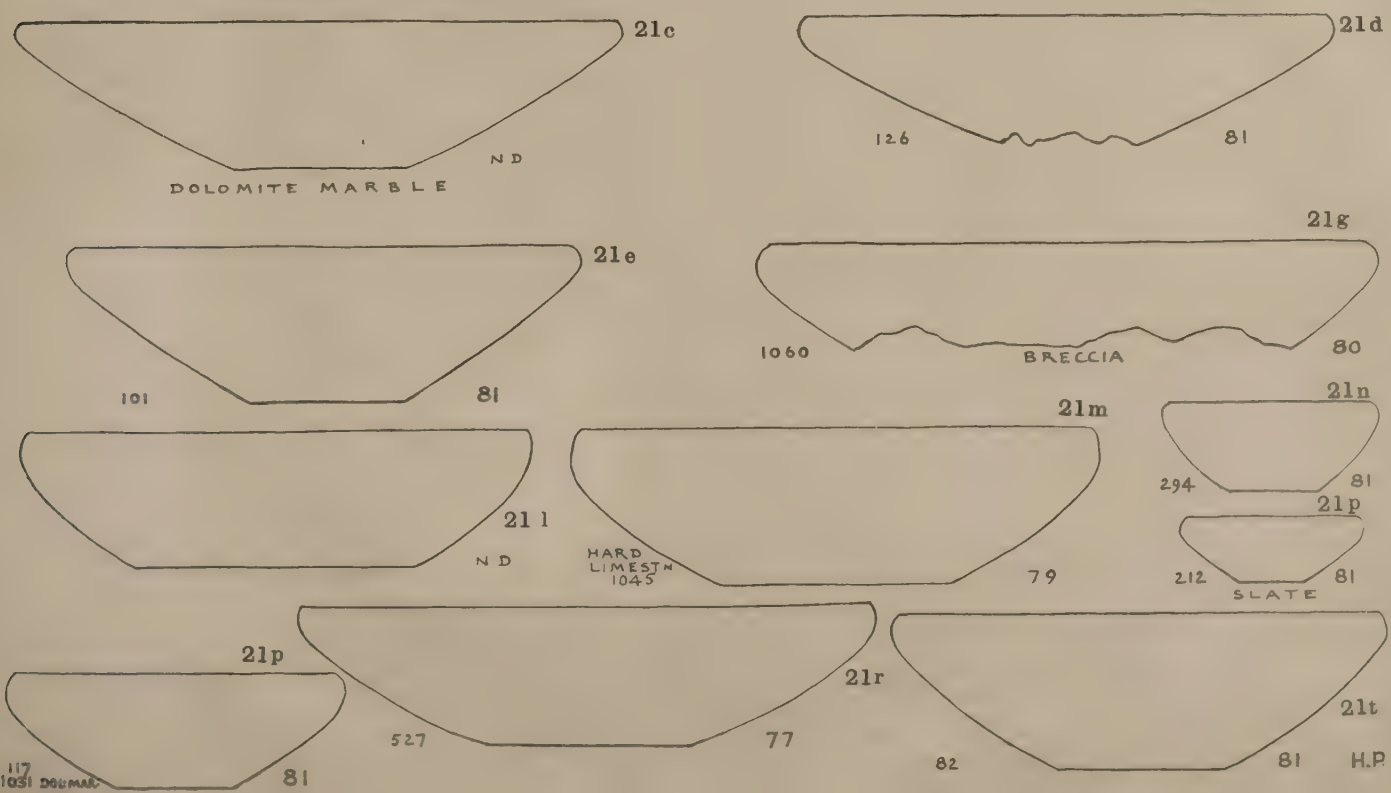
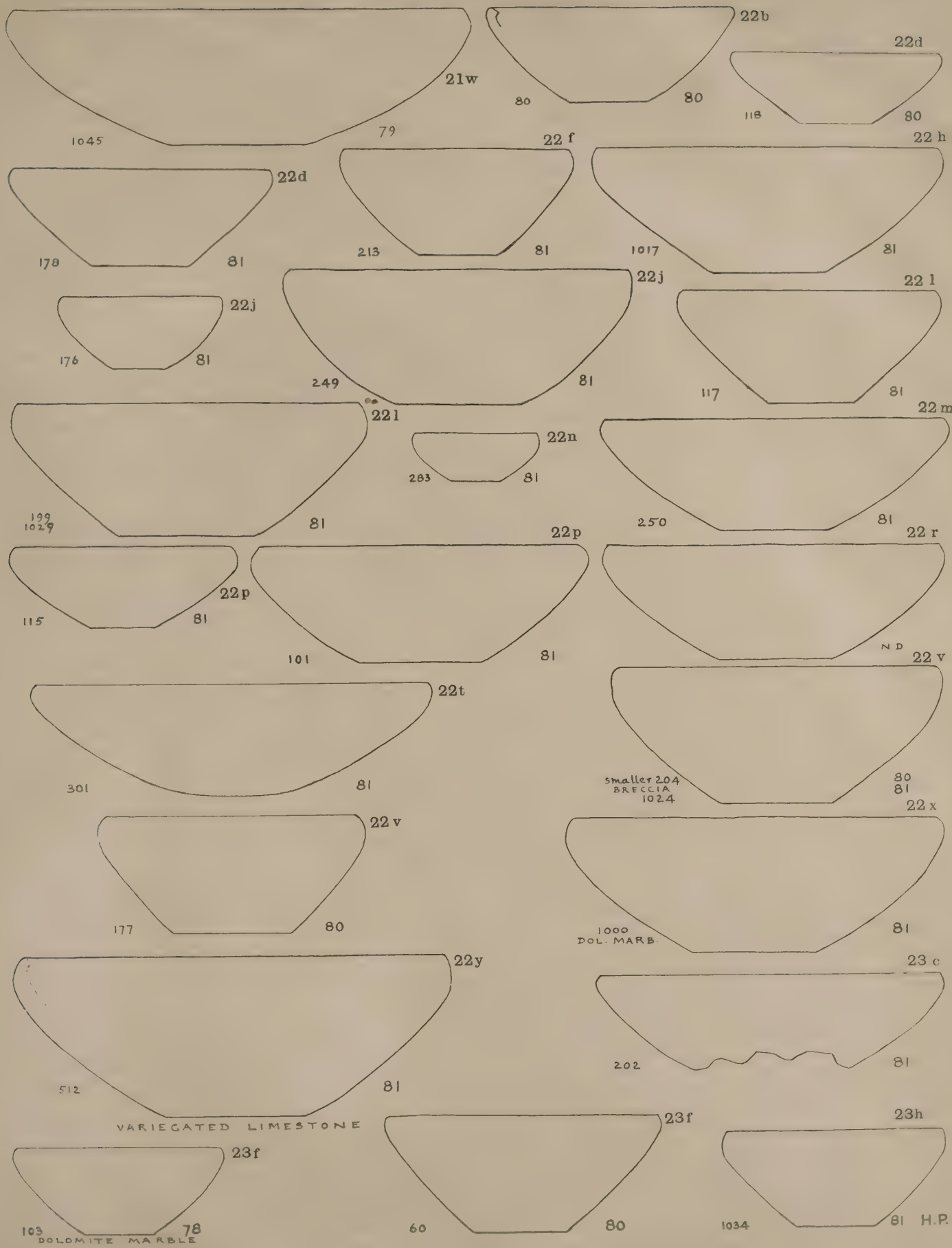


BOWLS (TURNING IN).




21w
1045
79
22b
80
80
22d
118
80
22d
178
81
22 f
213
81
22 h
1017
81
22j
176
81
22j
249
81
22 l
117
81
22l
199
1029
81
22n
283
81
22 m
250
81
22p
115
81
22p
101
81
22 r
ND
22t
301
81
22 v
smaller 204
BRECCIA
1024
80
81
22 v
177
80
22 x
1000
DOL. MARB.
81
22y
512
81
VARIEGATED LIMESTONE
23 c
202
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23f
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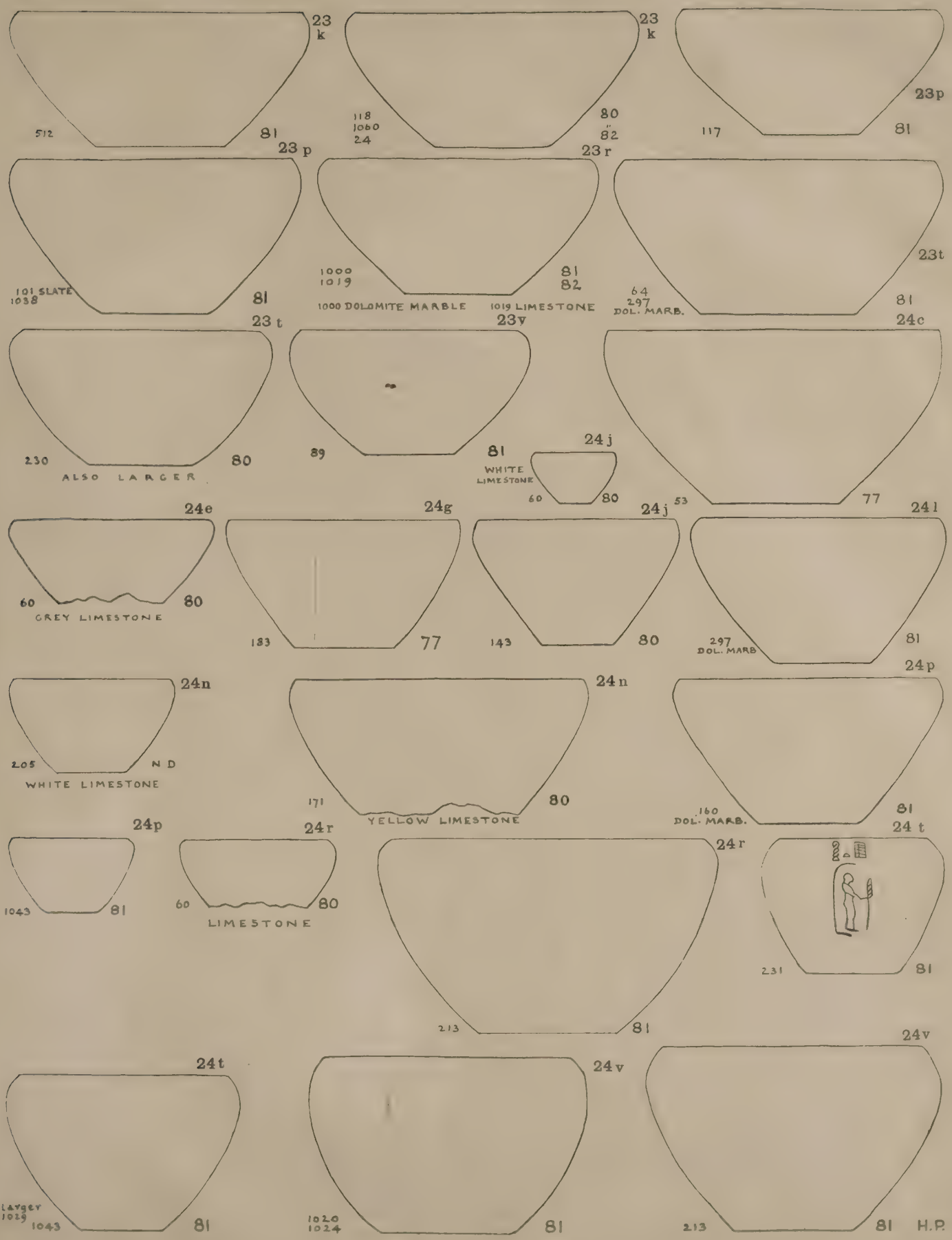
78
DOLOMITE MARBLE
23f
60
80
23h
1034
81 H.P.


23 k
512
81
23 k
118
1060
24
80
82
23p
117
81
23 p
101 SLATE
1038
81
23 r
1000
1019
81
82
1000 DOLOMITE MARBLE
1019 LIMESTONE
23t
64
297
DOL. MARB.
81
23 t
230
80
ALSO LARGER
23v
89
81
24c
24 j
WHITE LIMESTONE
60
80
77
24e
60
80
GREY LIMESTONE
24g
183
77
24j 53
143
80
24 l
297
DOL. MARB
81
24n
205
N D
WHITE LIMESTONE
24n
171
80
YELLOW LIMESTONE
24p
160
DOL. MARB.
81
24p
1043
81
24r
60
80
LIMESTONE
24r
213
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24 t
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24v
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1024
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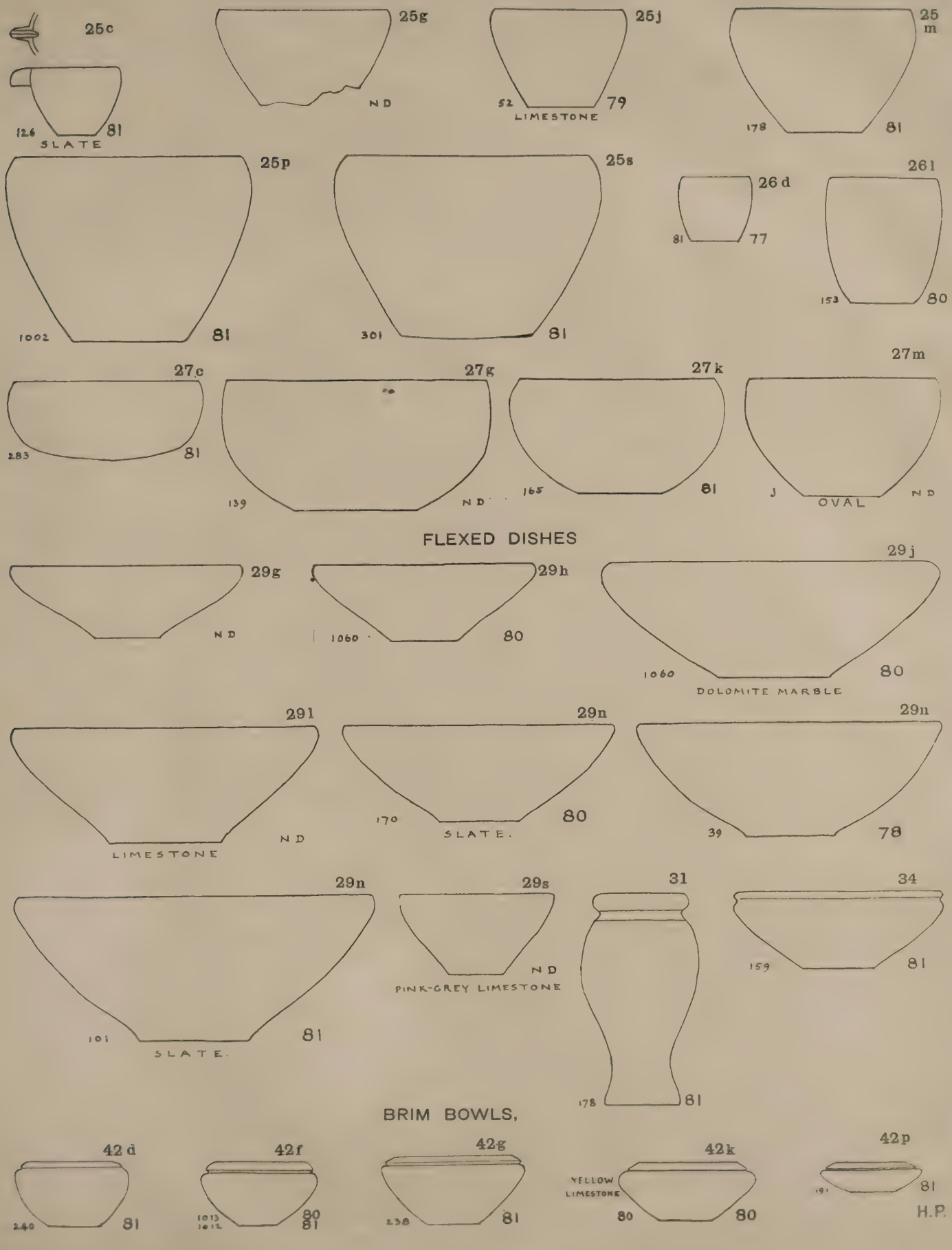
24v
213
81
H.P.


25c
126 81
SLATE
25g
ND
25j
52 79
LIMESTONE
25 m
178 81
25p
1002 81
25s
301 81
26d
81 77
26l
153 80
27c
283 81
27g
139 ND
27k
165 81
27m
J OVAL ND
FLEXED DISHES
29g
ND
29h
1060 80
29j
1060 80
DOLOMITE MARBLE
29l
LIMESTONE ND
29n
170 80
SLATE.
29n
39 78
29n
101 81
SLATE.
29s
ND
PINK-GREY LIMESTONE
31
178 81
34
159 81
BRIM BOWLS.
42d
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42g
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YELLOW LIMESTONE
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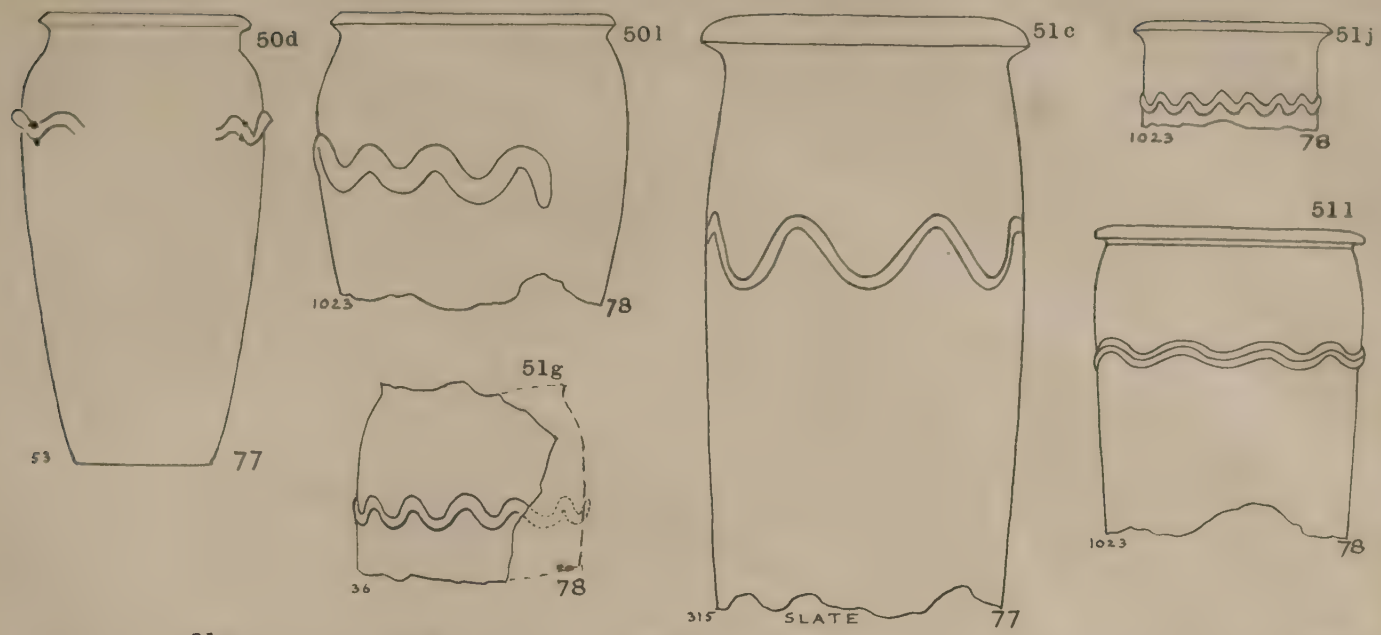
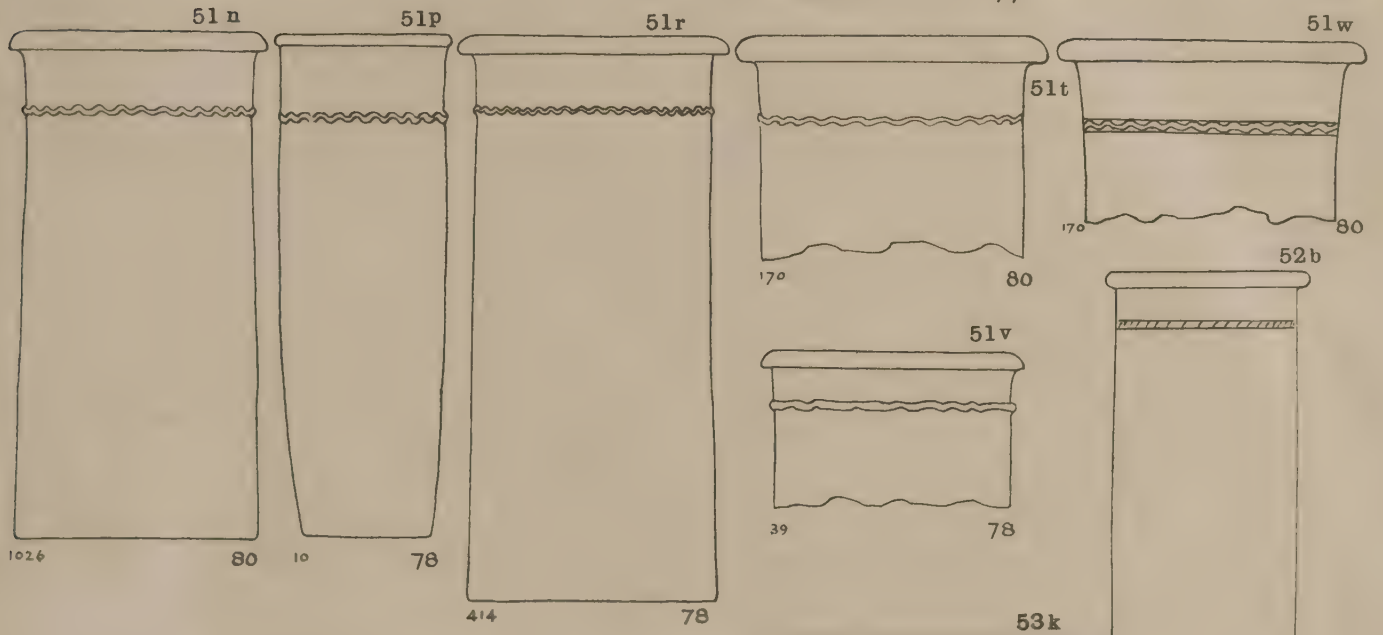
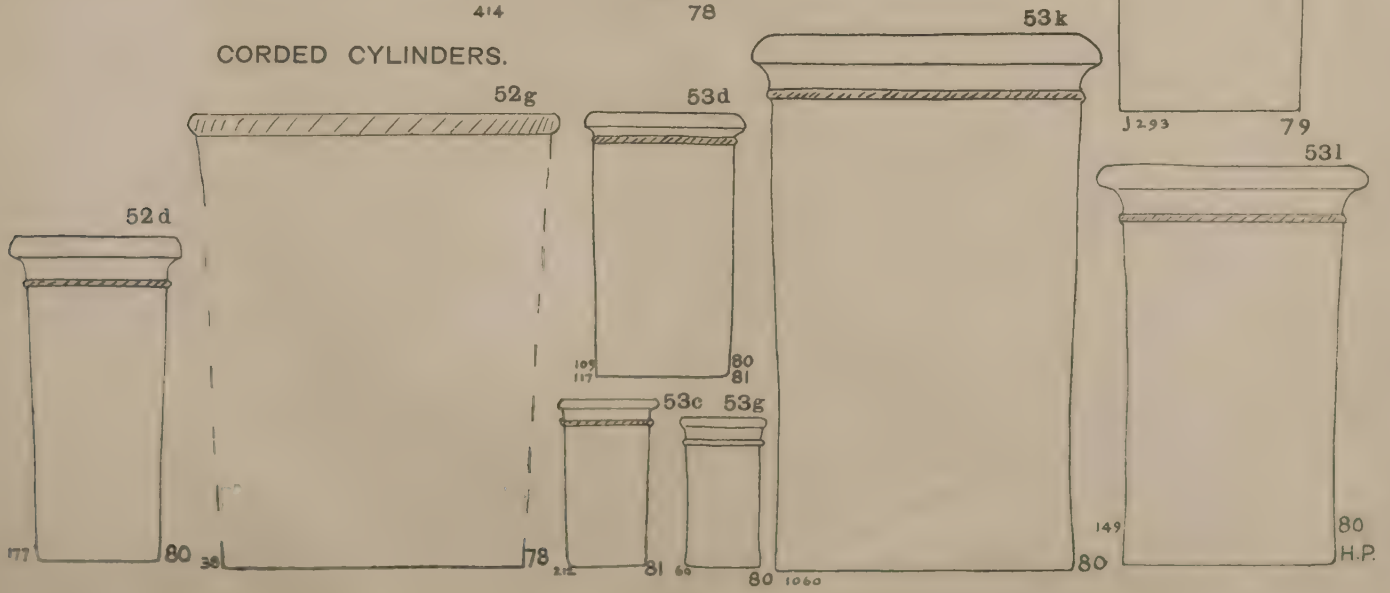
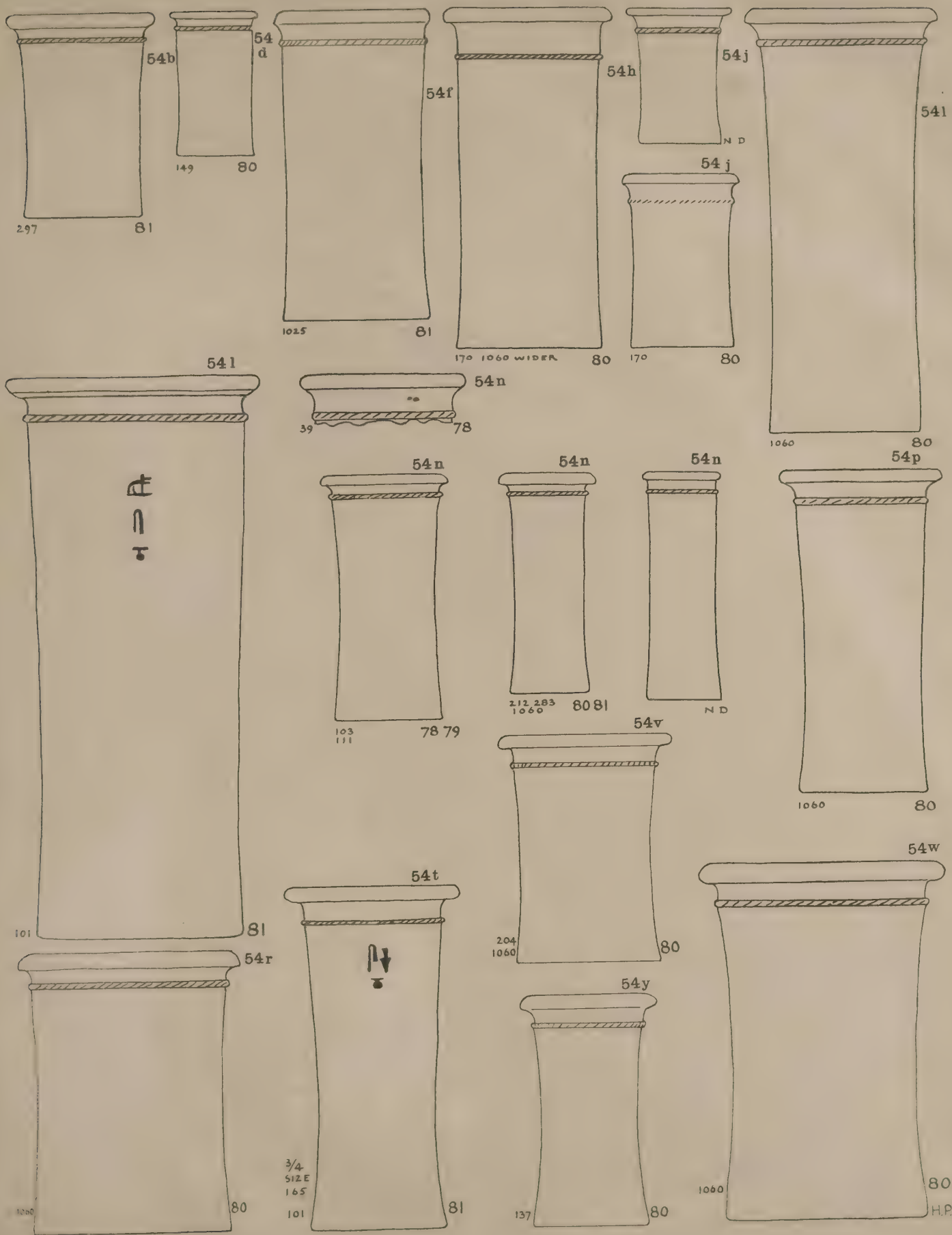
42p
191 81
H.P.





CORDED CYLINDERS.

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297 81
54 d
149 80
54f
1025 81
54h
170 1060 WIDER 80
54j
N D
54 j
170 80
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1060 80
541
101 81
54n
39 78
54n
103 111 78 79
54n
212 283 1060 80 81
54n
N D
54p
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1060 80 H.P.
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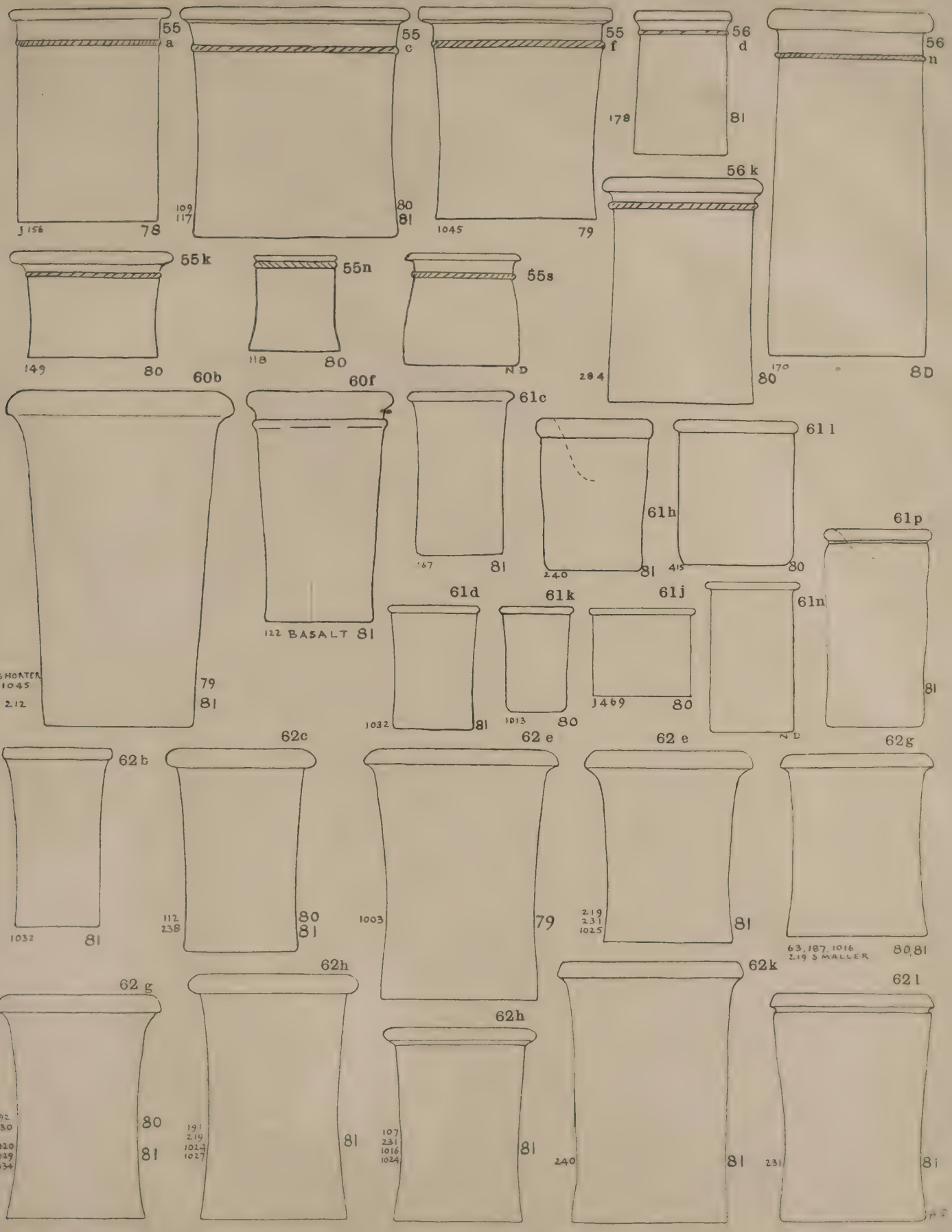
3/4 SIZE 165
101 81
54r
1060 80
54y
137 80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J 156
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55 c
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55 f
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56 d
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81
56 n
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80
8D
56 k
284
80
55 k
149
80
55n
118
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55s
ND
60b
SHORTER
1045
212
79
81
60f
122 BASALT 81
61c
167
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61h
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61 l
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61d
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1003
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62 e
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62g
63, 187, 1016
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1016
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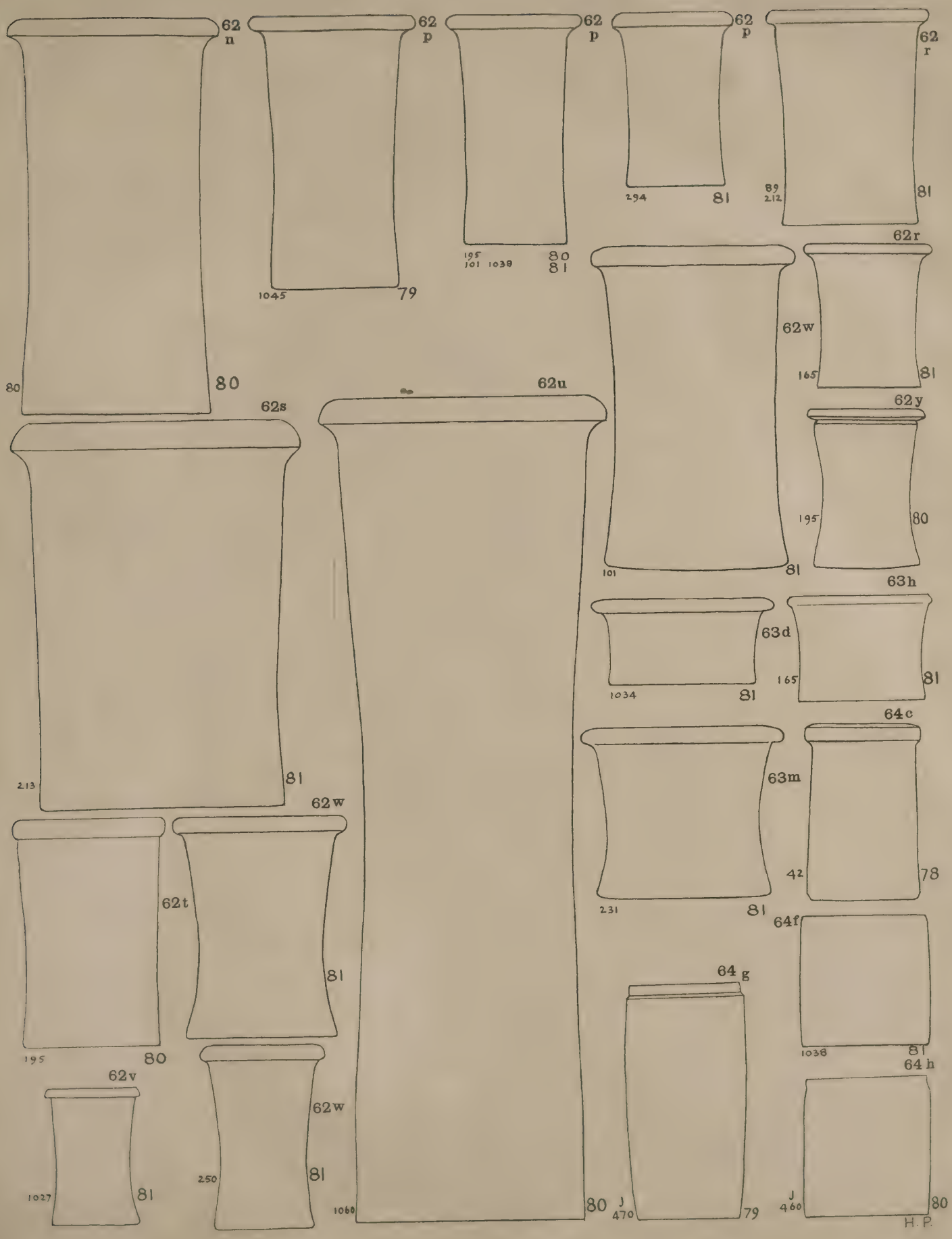
62 l
231
81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62y
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63m
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81
42
78
64f
62t
195
80
62w
81
64 g
1038
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64 h
62v
1027
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62w
250
81
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J
470
79
J
460
80
H. P.

70 d
261 78
71 c
118 80
71e
112 80
71g
1025? 81
71h
525 N.D
71 j
85 77
71l
474 79
71m
431
71r
1043 81
71t
319 77
SERPENTINE
71v
260 78
71 w
86 77
72b
269 81
72c
415 80
72e
J 179 80
72f
100 81
72g
61 81
72h
J179 80
73d
250 81
LIMESTONE
73 g
81 77
PINK-WT LIMESTONE
73h
19 79
76h
219 81
77d
315
LARGER {481 77
1023 81
78
77e
ND
PEAR VASES.
77g
1008 81
77h
212 81
SERPENTINE
77k
24 82
77k
230 80
77m
80 80
1020 81
77m
1008 81
77q
146 81
77 s
H.P.
LARGER 112 80
153 80
SMALLER 1008 81.
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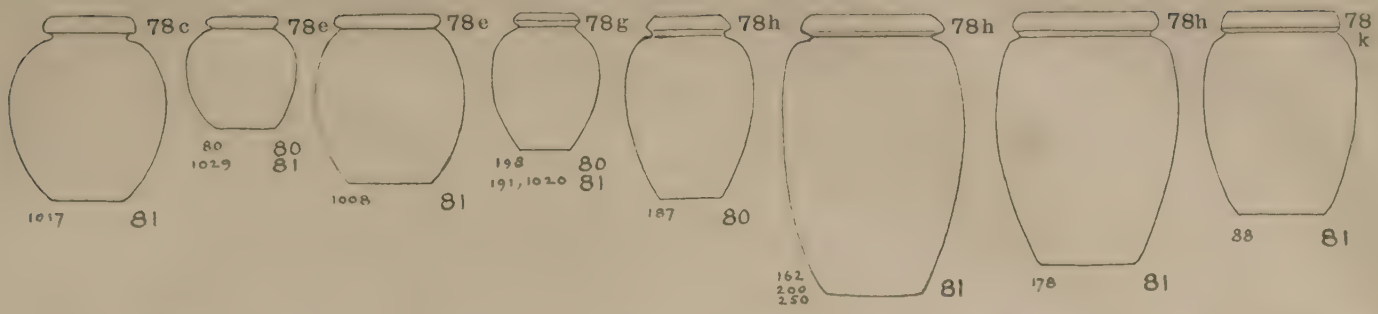
77q
191 81
1029
77q
4 81
212
481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191, 1020 81
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162 200 250 81
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78 k
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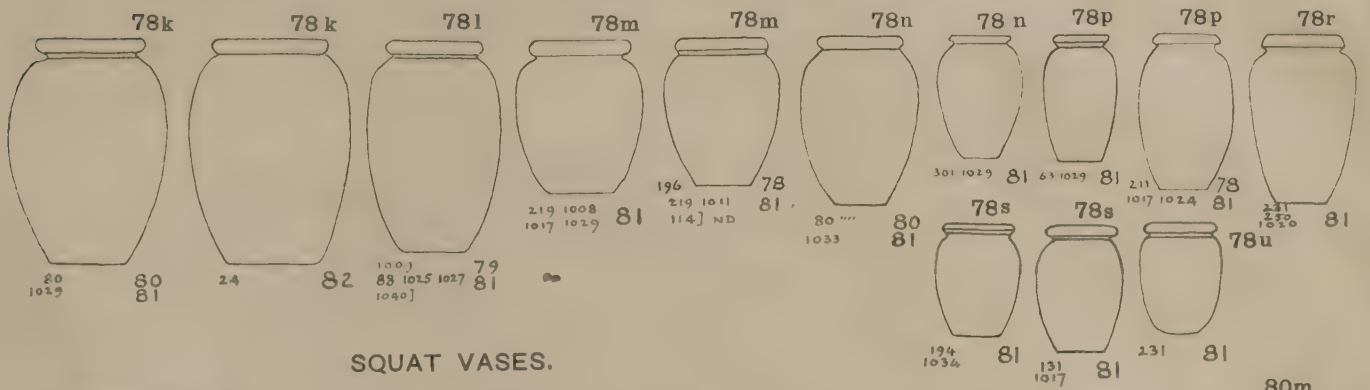
78k
80 1029 80 81
78 k
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78l
100] 88 1025 1027 79
1040] 81
78m
219 1008
1017 1029 81
78m
196 78
219 1011 81
114] ND
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78 n
301 1029 81
78p
63 1029 81
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78s
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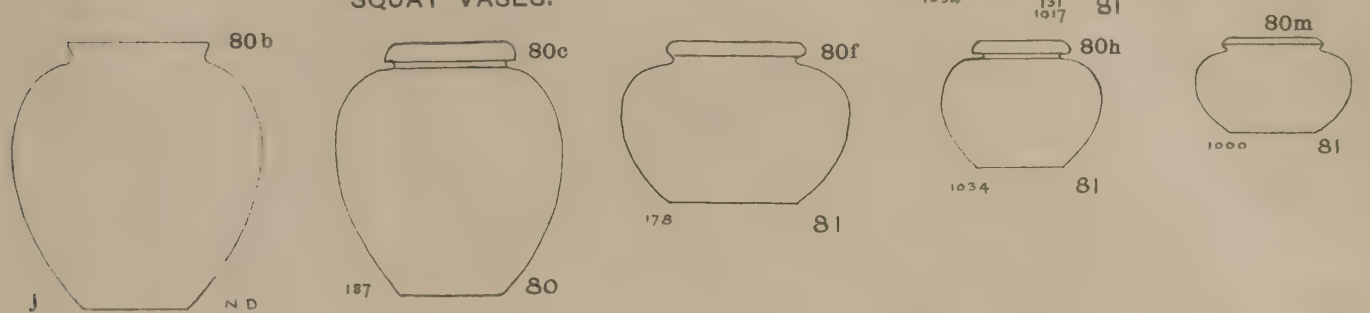
131 1017 81
78u
231 81

SQUAT VASES.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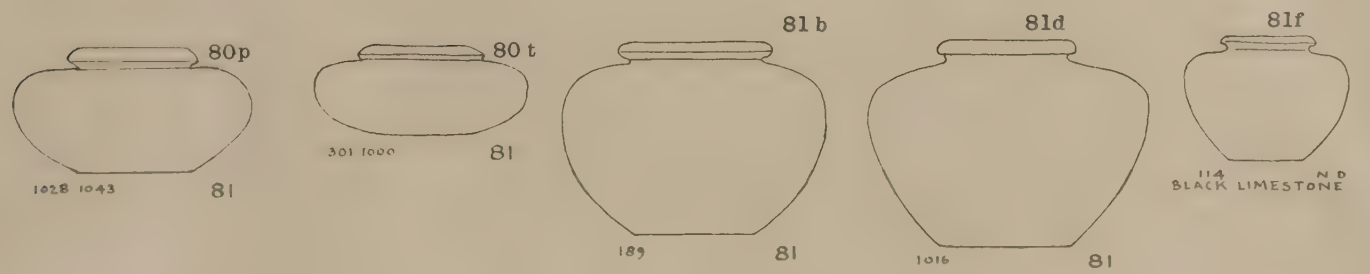
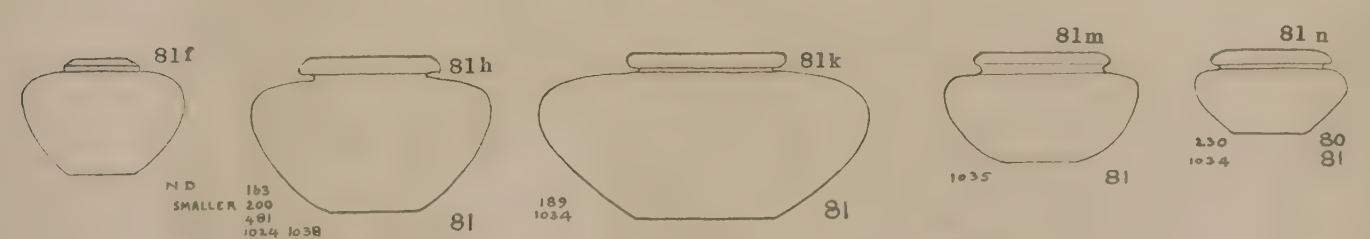
80c
187 80
80f
178 81
80h
1034 81
80m
1000 81


80p
1028 1043 81
80 t
301 1000 81
81 b
189 81
81d
1016 81
81f
114 ND
BLACK LIMESTONE


81f
ND
SMALLER 200
491
1024 1038
1022 ND
81h
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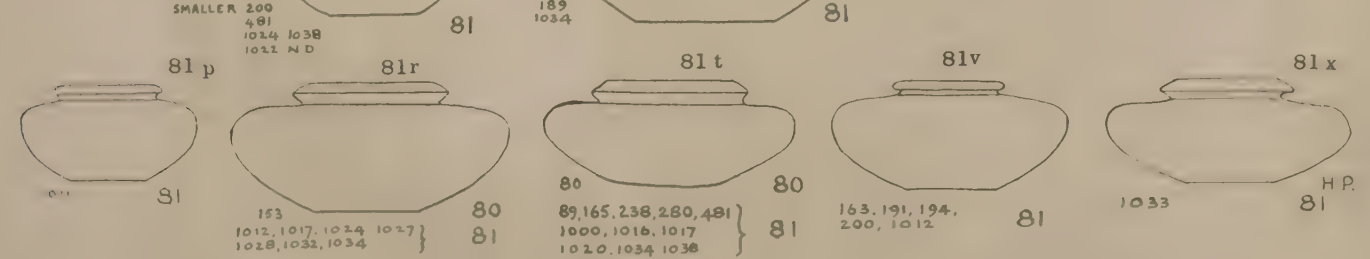
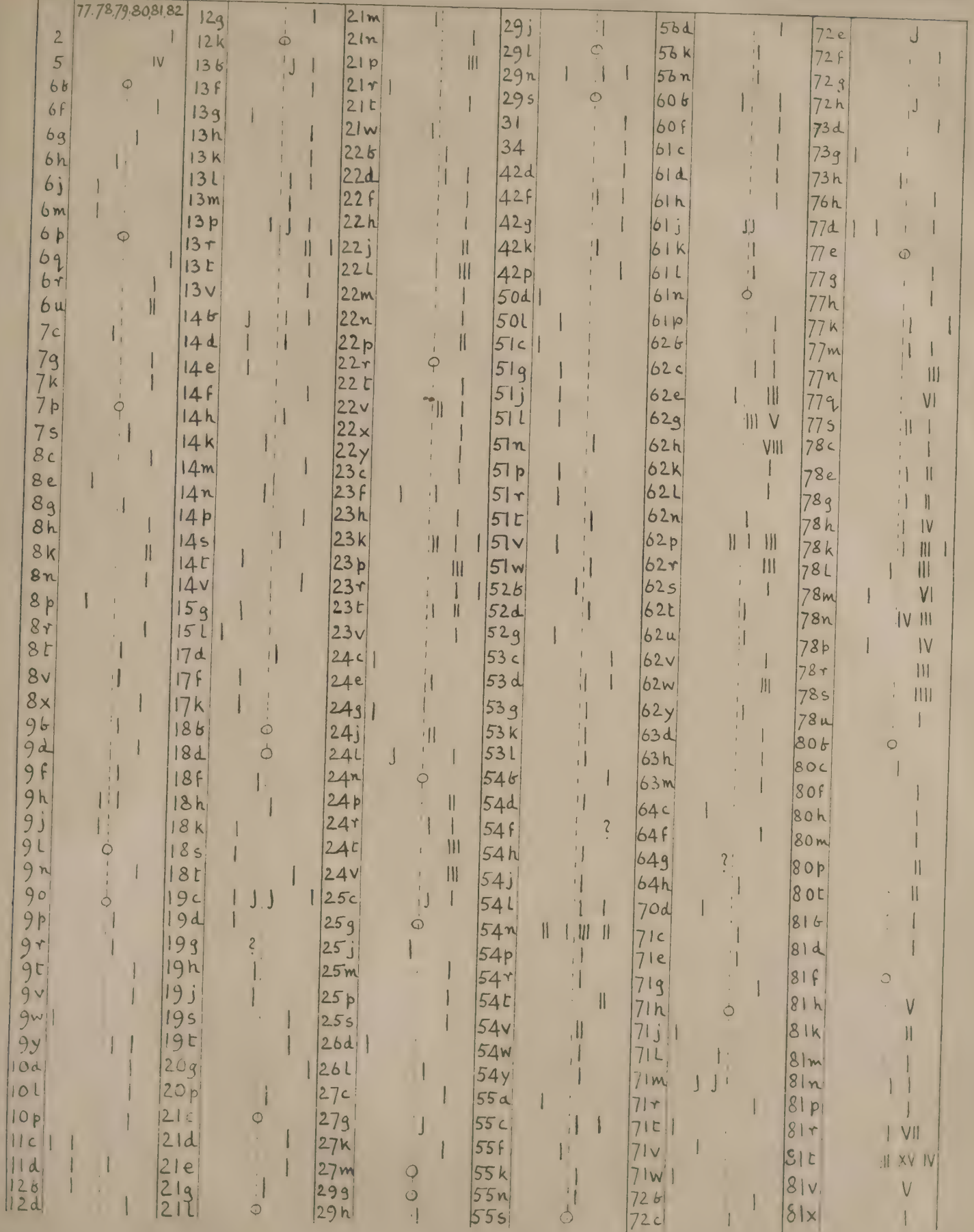
81
81k
189
1034 81
81m
1035 81
81 n
230 80
1034 81


81 p
81
81r
153 80
1012, 1017, 1024 1027
1028, 1032, 1034 81
81 t
80 80
89, 165, 238, 280, 481
1000, 1016, 1017
1020, 1034 1038 81
1039
1022 ND 82
81v
163, 191, 194,
200, 1012 81
81 x
1033 H.P.
81


77.78.79.80.81.82
2
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6b
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6h
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6p
6q
6r
6u
7c
7g
7k
7p
7s
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9p
9r
9t
9v
9w
9y
10a
10l
10p
11c
11d
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27k
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42d
42f
42g
42k
42p
50d
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73d
73g
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76h
77d
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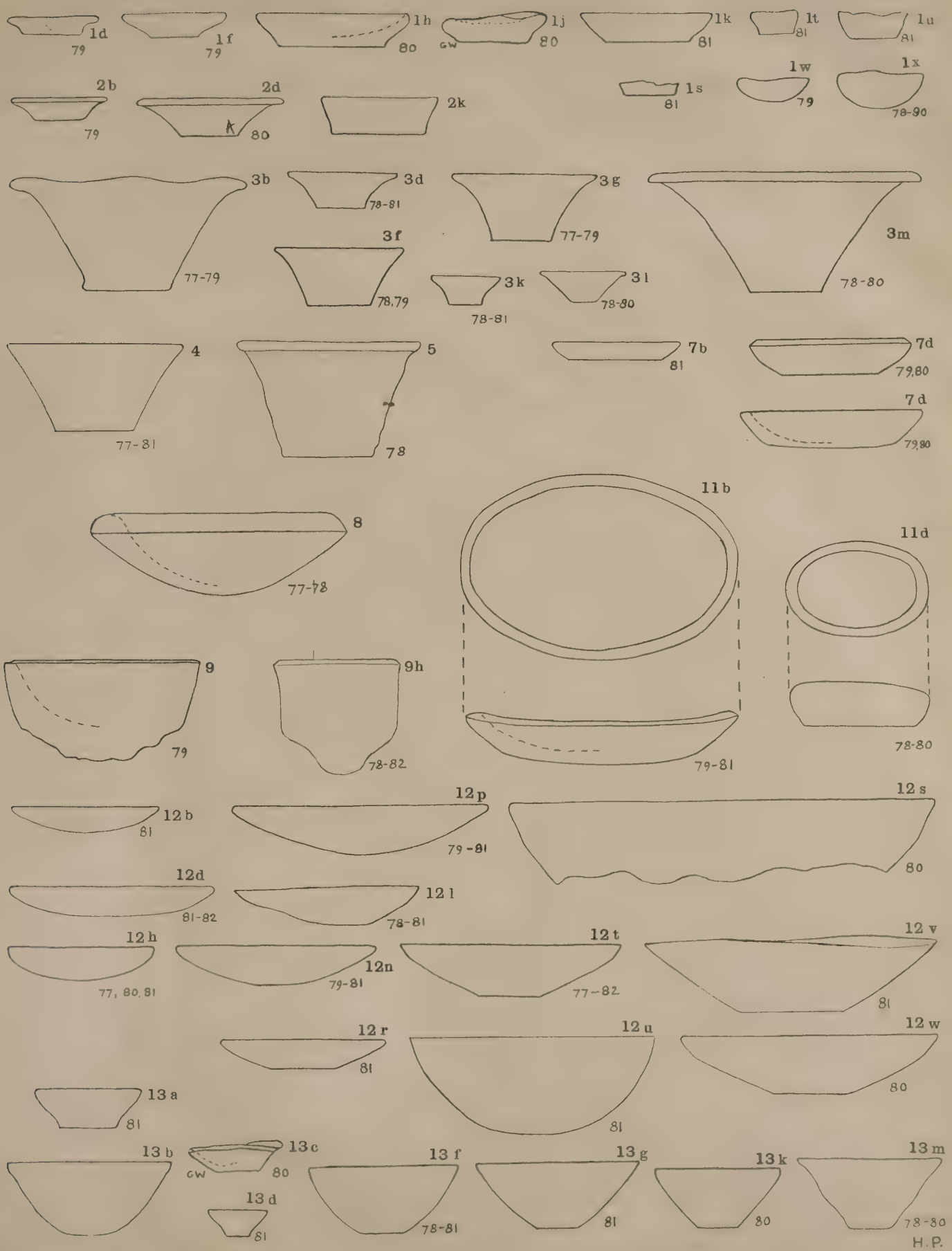
81t
81v
81x


1d
79
1f
79
1h
80
1j
GW
80
1k
81
1t
81
1u
81
2b
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2d
80
2k
1s
81
1w
79
1x
78-90
3b
77-79
3d
78-81
3f
78.79
3g
77-79
3k
78-81
3l
78-80
3m
78-80
4
77-81
5
78
7b
81
7d
79,80
7d
79,80
8
77-78
11b
79-81
11d
78-80
9
79
9h
78-82
12b
81
12p
79-81
12s
80
12d
81-82
12l
78-81
12h
77, 80, 81
12n
79-81
12t
77-82
12v
81
12r
81
12u
81
12w
80
13a
81
13b
13c
GW
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13d
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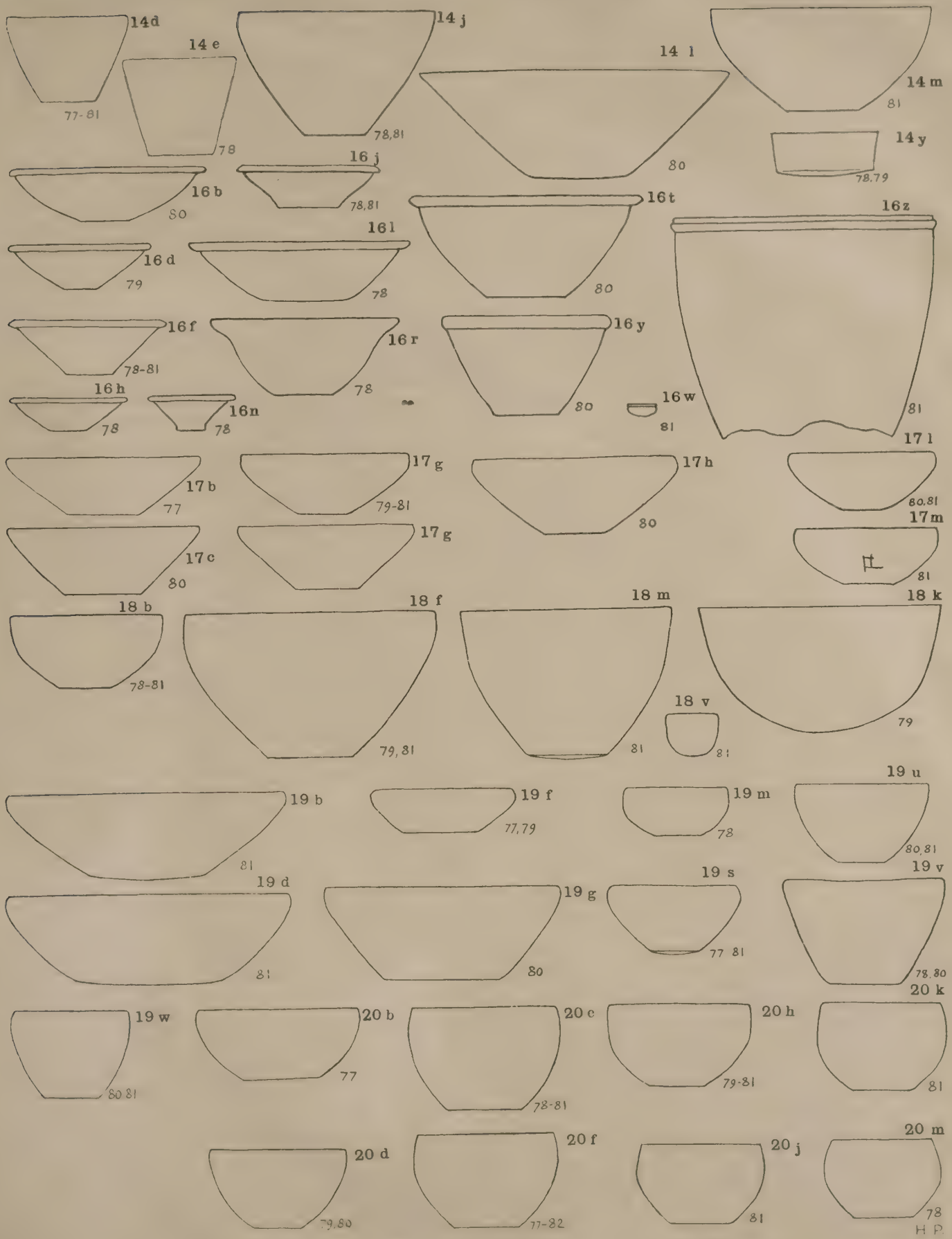
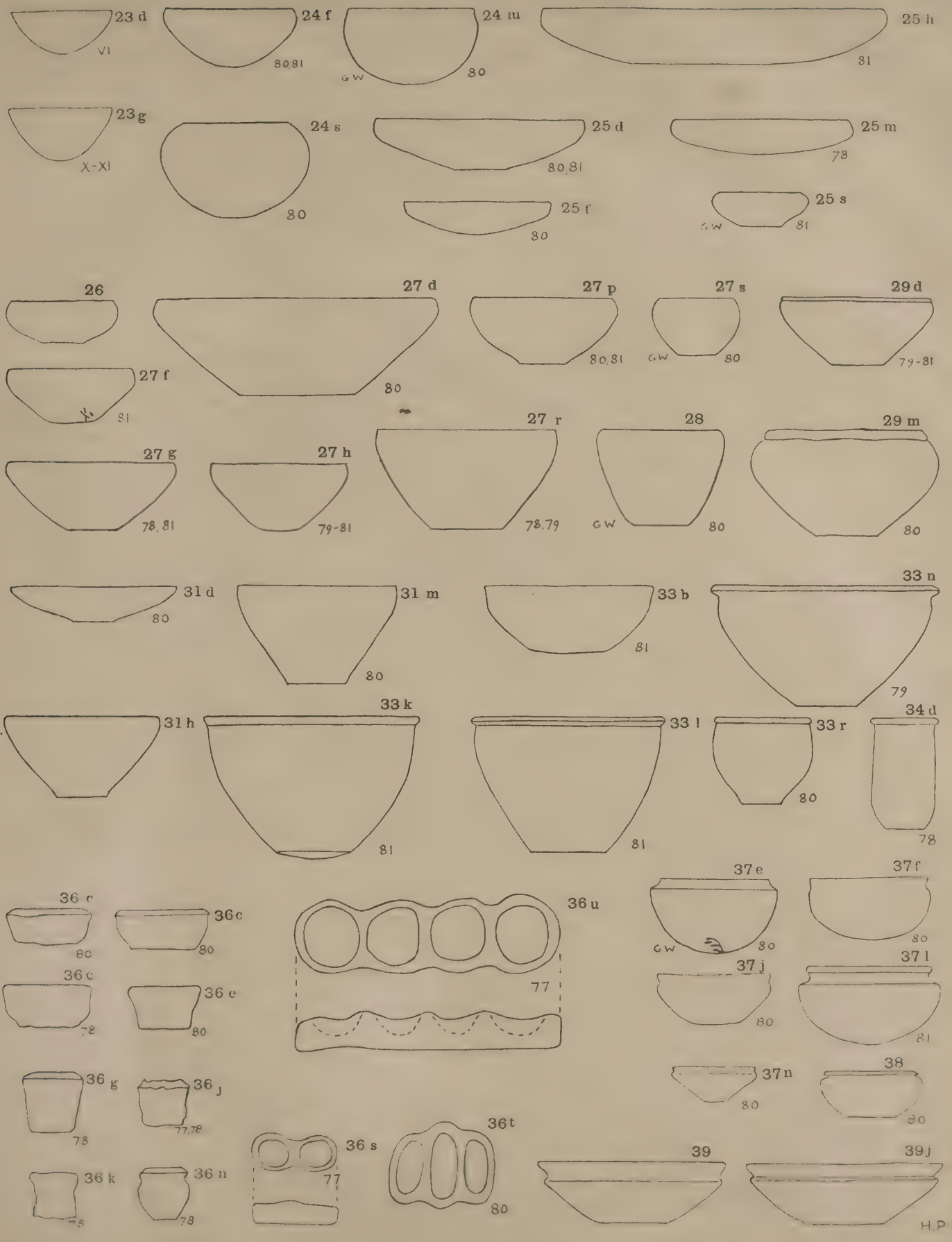
13f
78-81
13g
81
13k
80
13m
78-80

H.P.


14d
77-81
14 e
78
14 j
78,81
14 l
80
14 m
81
14 y
78.79
16 b
80
16 j
78,81
16t
80
16z
81
16 d
79
16 l
78
16 f
78-81
16 r
78
16y
80
16 h
78
16n
78
16w
81
17 l
80.81
17 b
77
17 g
79-81
17h
80
17m
81
17c
80
17 g
18 b
78-81
18 f
79,81
18 m
81
18 v
81
18 k
79
19 b
81
19 f
77,79
19 m
78
19 u
80,81
19 d
81
19 g
80
19 s
77 81
19 v
78.80
19 w
80 81
20 b
77
20 c
78-81
20 h
79-81
20 k
81
20 d
79,80
20 f
77-82
20 j
81
20 m
78

H P.


23 d
VI
24 f
80,81
24 m
GW
80
25 h
81
23 g
X-XI
24 s
80
25 d
80,81
25 m
78
25 f
80
25 s
GW
81
26
27 d
80
27 p
80,81
27 s
GW
80
29 d
79-81
27 f
81
27 r
78,79
28
GW
80
29 m
80
27 g
78,81
27 h
79-81
31 d
80
31 m
80
33 b
81
33 n
79
31 h
33 k
81
33 l
81
33 r
80
34 d
78
36 c
80
36 c
80
36 c
78
36 e
80
36 u
77
37 e
GW
80
37 f
80
37 j
80
37 l
81
37 n
80
38
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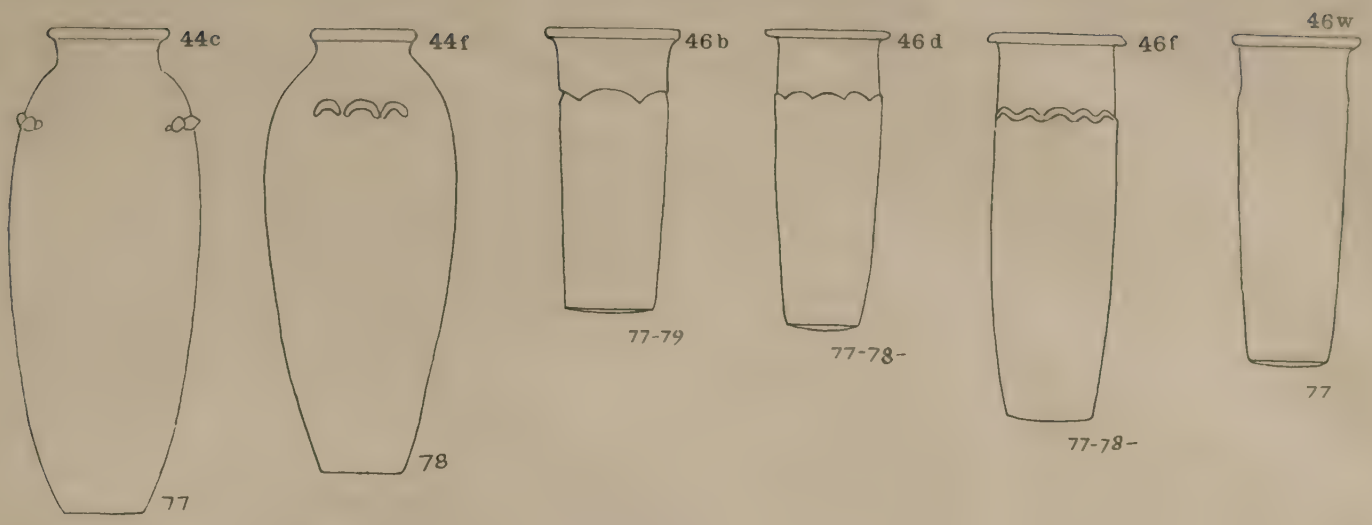
36 g
78
36 j
77,78
36 k
78
36 n
78
36 s
77
36 t
80
39
39 j
H.P



TYPE PATTERNS ON CYLINDER JARS.

46b Bold projecting ridges. 77,78-

46d Sharp ridge pushed up. 77,78-

46f Pushed up, flattened. 77,78-

46h Squeezed up by thumb. 77,78-

46k Squeezed in by finger. 77,78-

46m Wiped low above, ridge pushed up. 77-

46p Wiped low above, ridge smudged up. 77,78

46r Faint irregular hollows. 77

46t Faint ridge dabbed by finger. 77

46w Faint lumps. 77

47b Jabbed up with a stick. 78-79

47d Jabbed with finger nail. 77-79

47f Wiped with stick or finger. 78

47h Wiped low below, ridge pushed up. 77-79

47k Deep groove scored by stick. 79

47m Deep groove, lower edge smudged. 78-80

47p Wiped low below, ridge pushed up. -77,78-

47s same. 78,79

48d Wiped low above and below, ridge notched. 78

48g Ridge notched, deep groove below. 78,79

48l Slight groove, upper edge notched? 78-

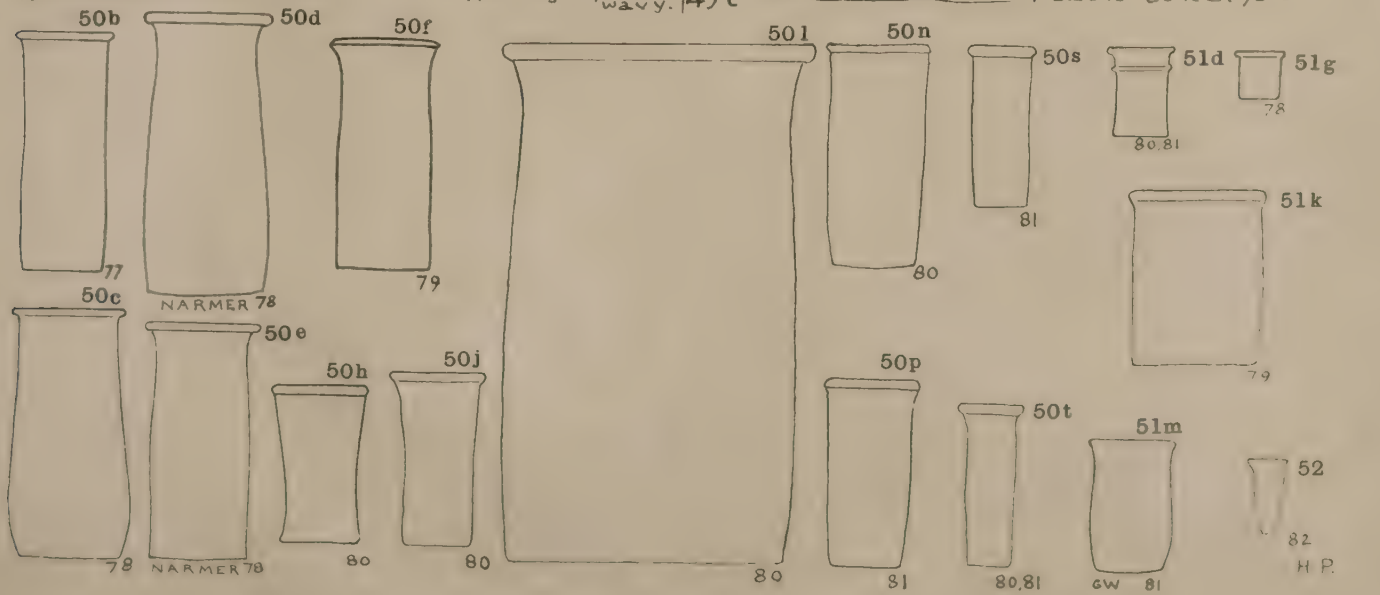
48s Cord impress. 78-

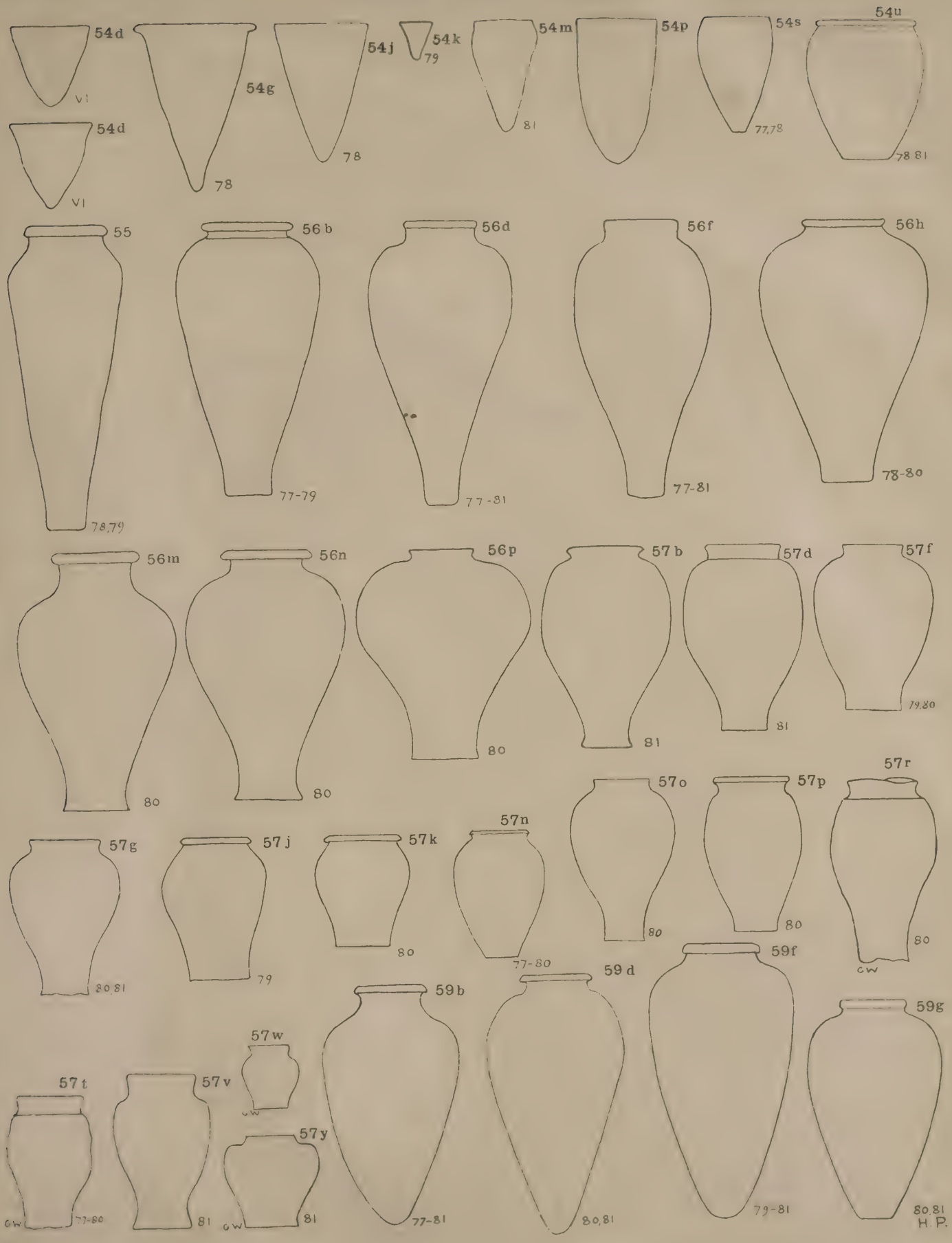
48t Cord impress left handed. 78-

49d Groove, upper edged pushed wavy. 78,79

49g Jabbed by a point. 78-80

49l Plain Line. 78-80




54d
VI
54d
VI
54g
78
54j
78
54k
79
54m
81
54p
54s
77,78
54u
78 81
55
78,79
56b
77-79
56d
77-81
56f
77-81
56h
78-80
56m
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56n
80
56p
80
57b
81
57d
81
57f
79,80
57g
80,81
57j
79
57k
80
57n
77-80
57o
80
57p
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57r
80
CW
57t
CW 77-80
57v
81
57w
CW
57y
CW 81
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77-81
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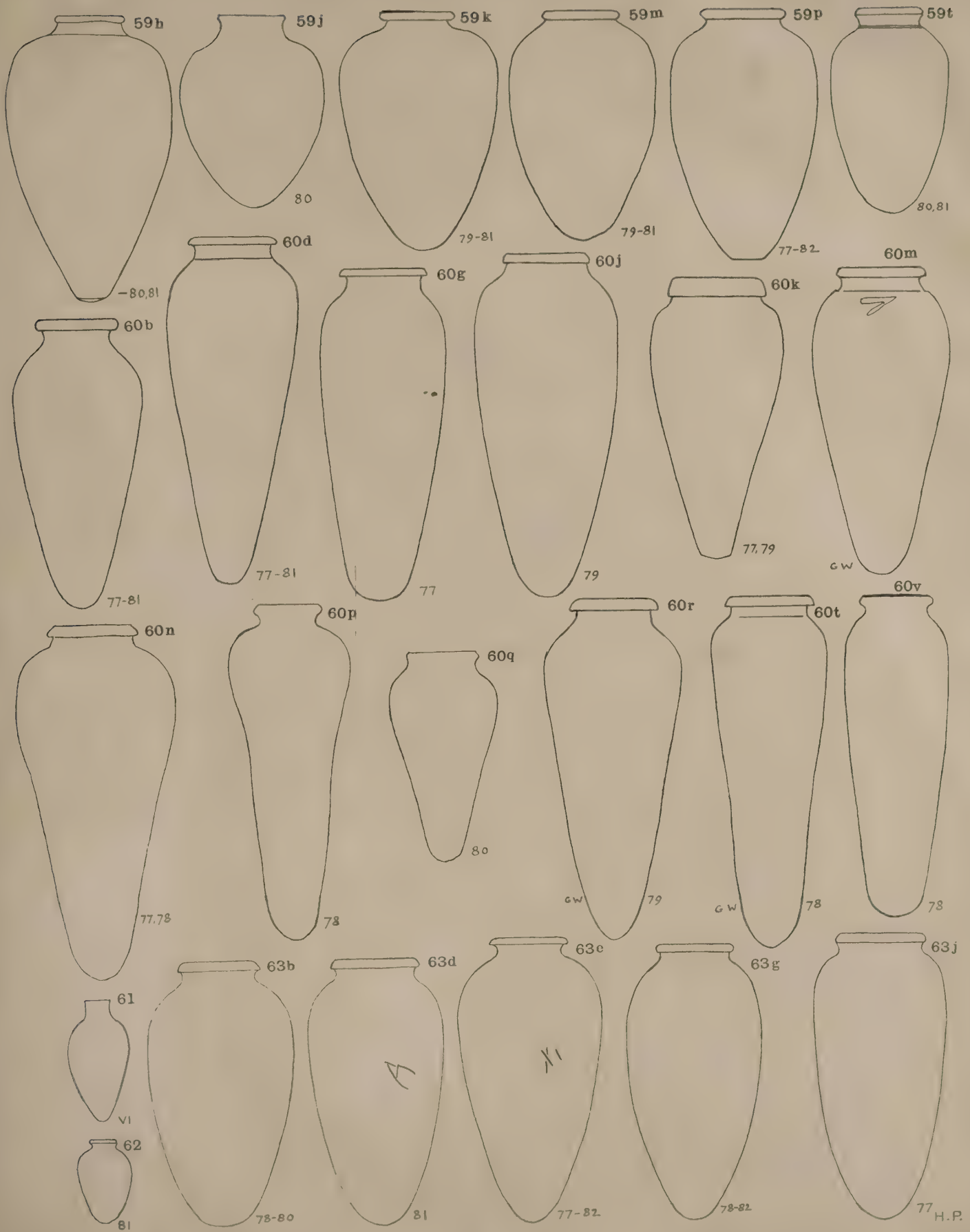
59f
79-81
59g
80,81
H.P.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59k
79-81
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79-81
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77-82
59t
80,81
60d
77-81
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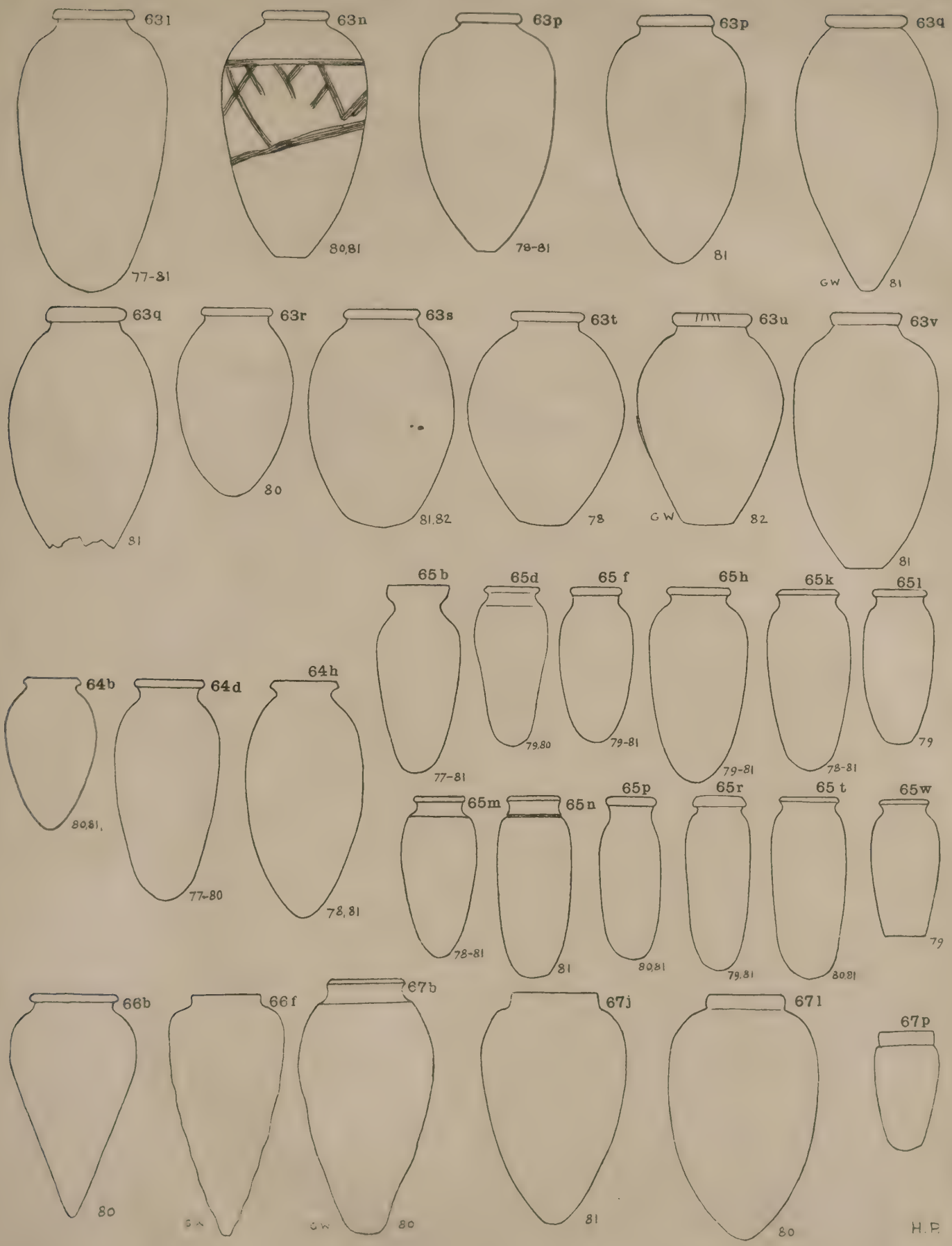
60j
79
60k
77,79
60m
GW
80-81
60b
77-81
60n
77,78
60p
78
60q
80
60r
GW 79
60t
GW 78
60v
78
61
VI
62
81
63b
78-80
63d
81
63c
77-82
63g
78-82
63j
77 H.P.


63l
77-81
63n
80,81
63p
78-81
63p
81
63q
GW 81
63q
81
63r
80
63s
81,82
63t
78
63u
GW 82
63v
81
65b
77-81
65d
79,80
65 f
79-81
65h
79-81
65k
78-81
65l
79
64b
80,81,
64d
77-80
64h
78, 81
65m
78-81
65n
81
65p
80,81
65r
79,81
65 t
80,81
65w
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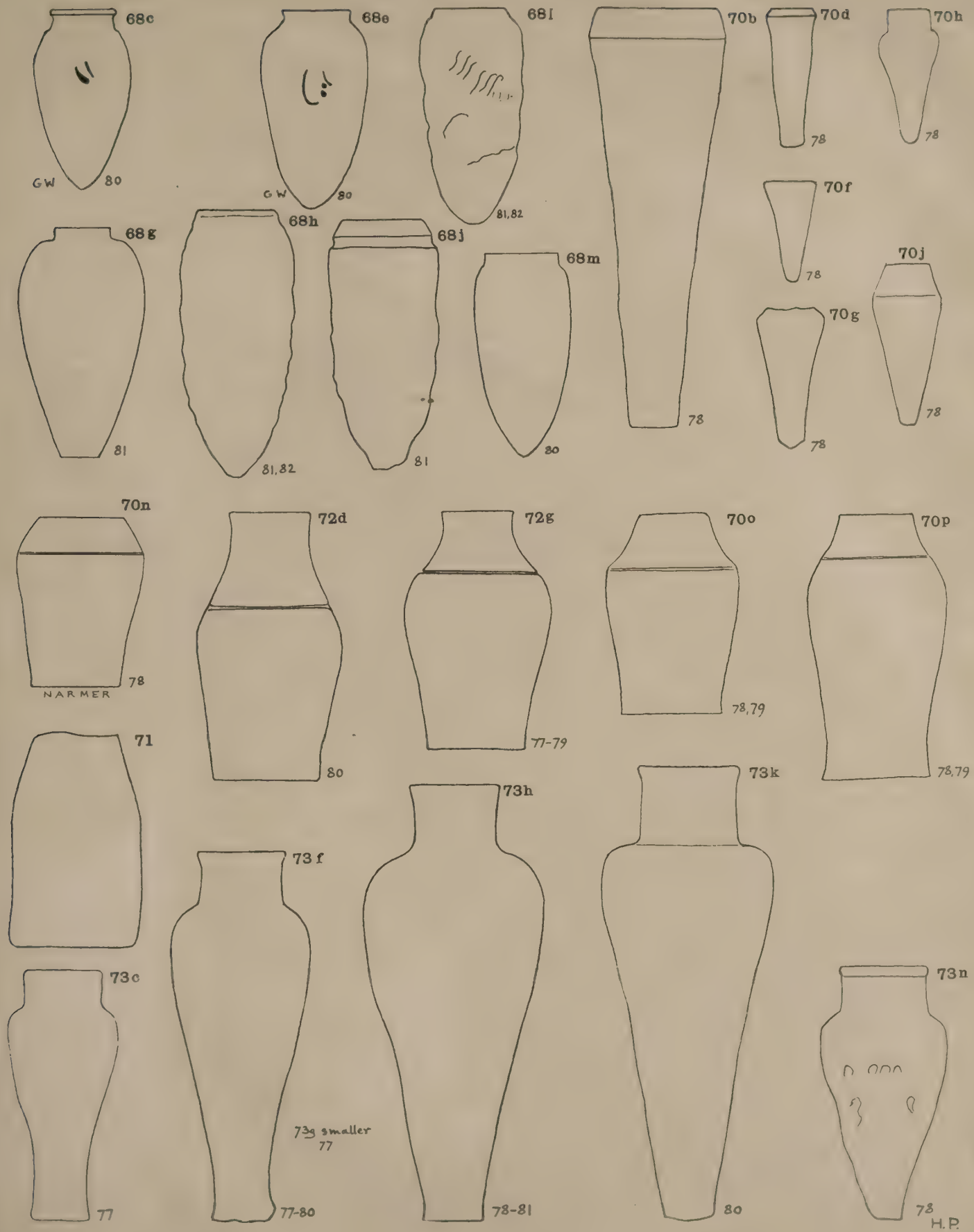
66f
GW
67b
GW 80
67j
81
67l
80
67p
H.P.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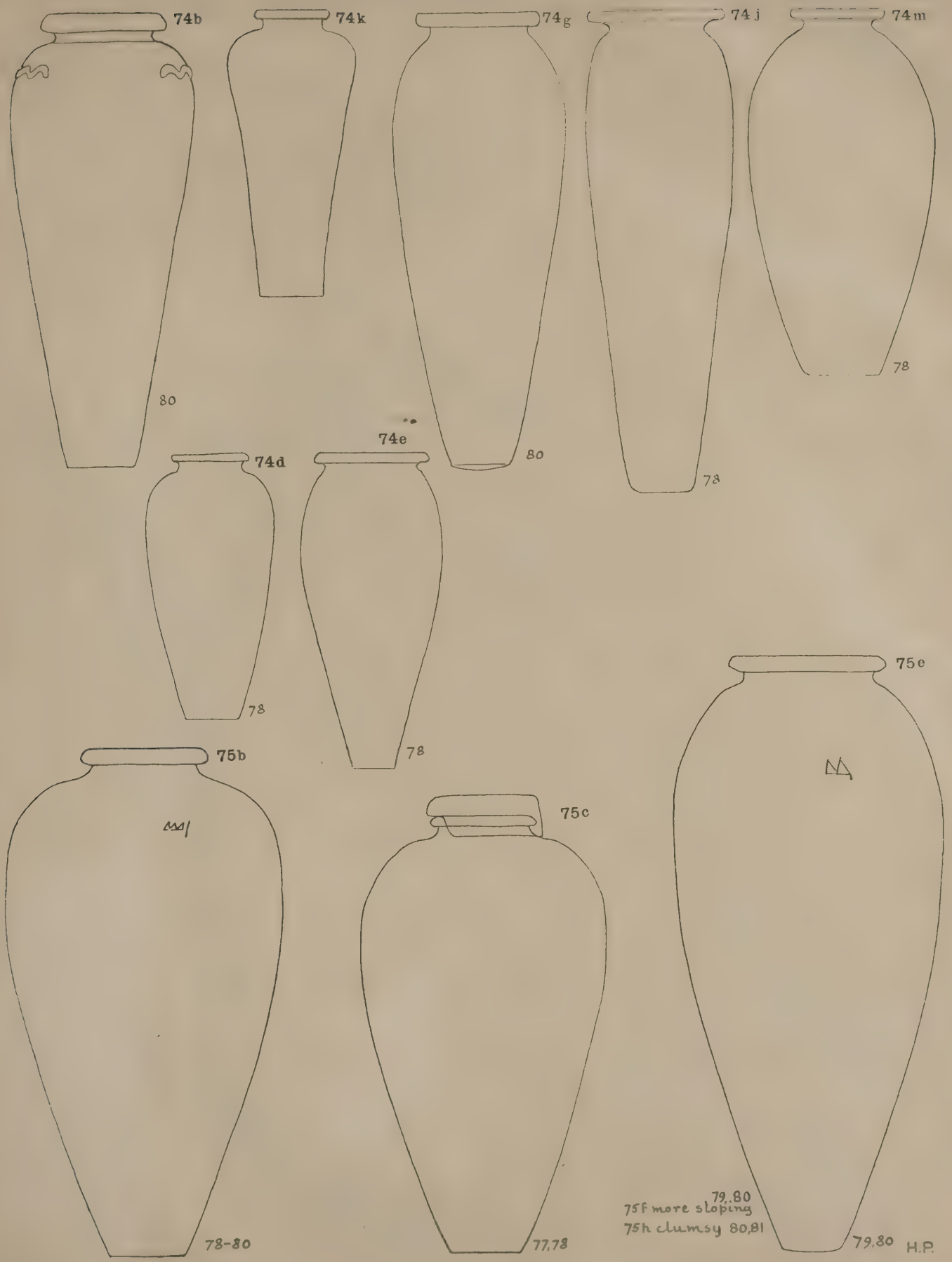
GW 80
68e
GW 80
68l
81,82
70b
78
70d
78
70h
78
70f
78
70g
78
70j
78
68g
81
68h
81,82
68j
81
68m
80
70n
NARMER 78
72d
80
72g
77-79
70o
78,79
70p
78,79
71
73k
73h
73f
73g smaller
77
73c
77
77-80
78-81
80
73n
78
H.P.


74b
80
74k
74g
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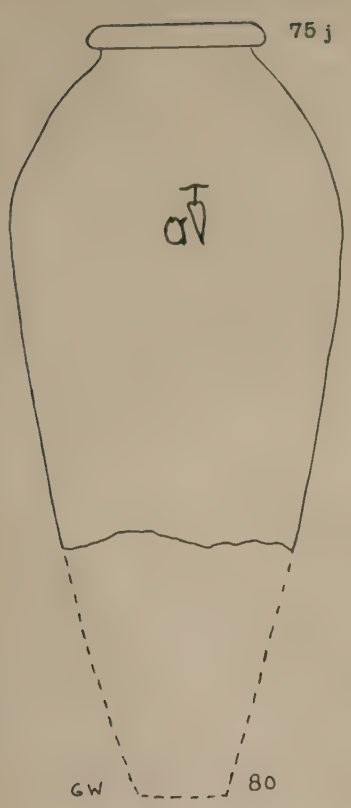
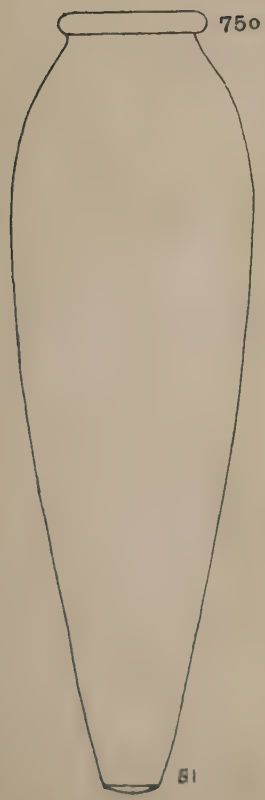
74j
78
74m
78
74d
78
74e
78
75b
78-80
75c
77,78
75e
79,80
75f more sloping
75h clumsy 80,81
79,80
H.P.

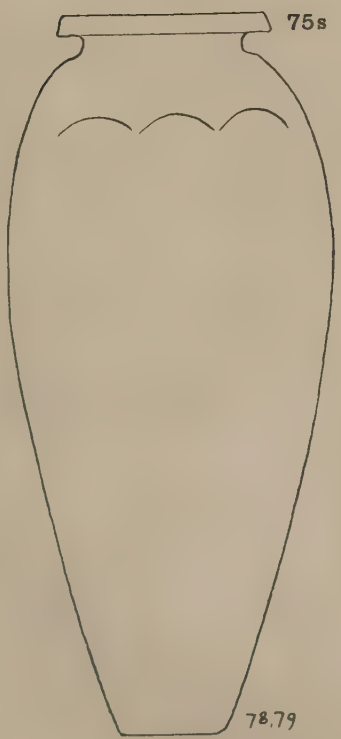

75 j
GW
80

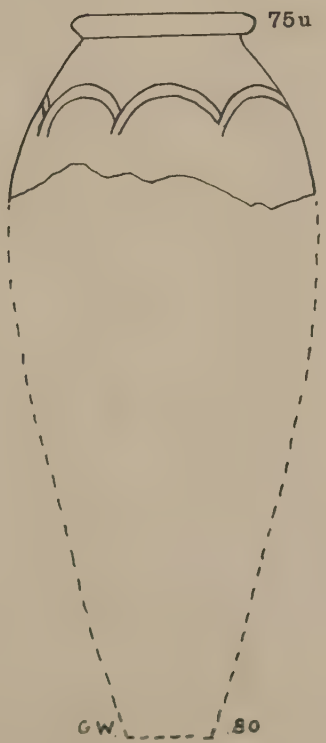
75k
79

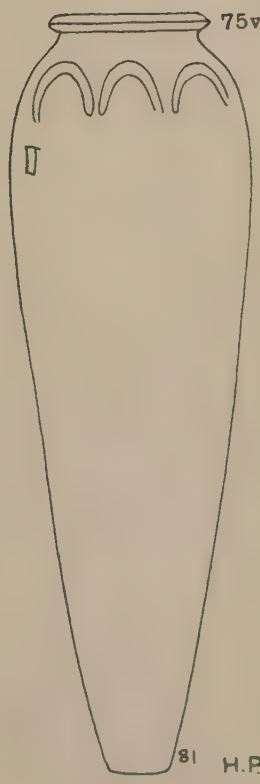
75m
81

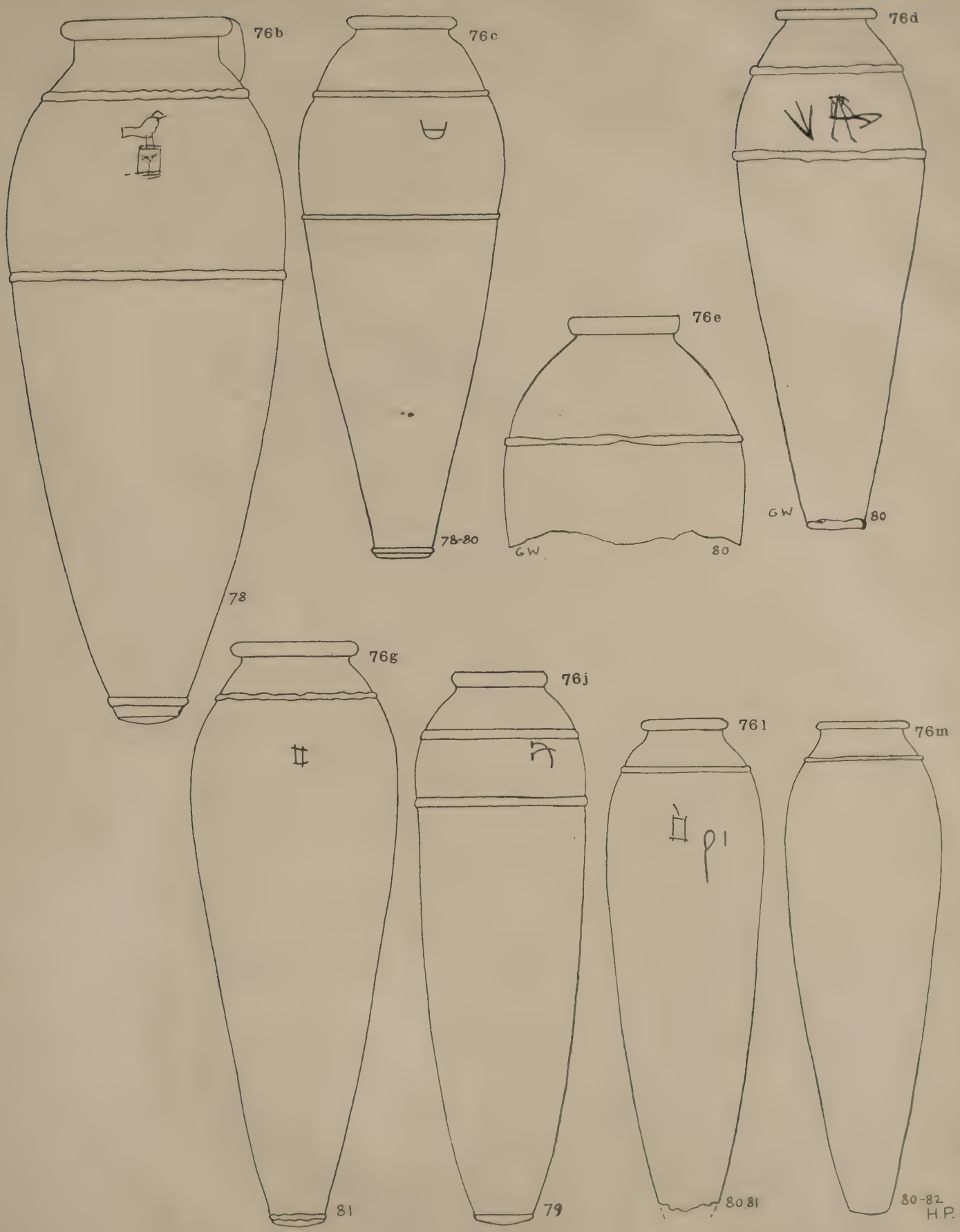
75n
79-81


75o
81


75s
78,79


75u
GW
80


75v
81
H.P.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76d
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GW
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GW
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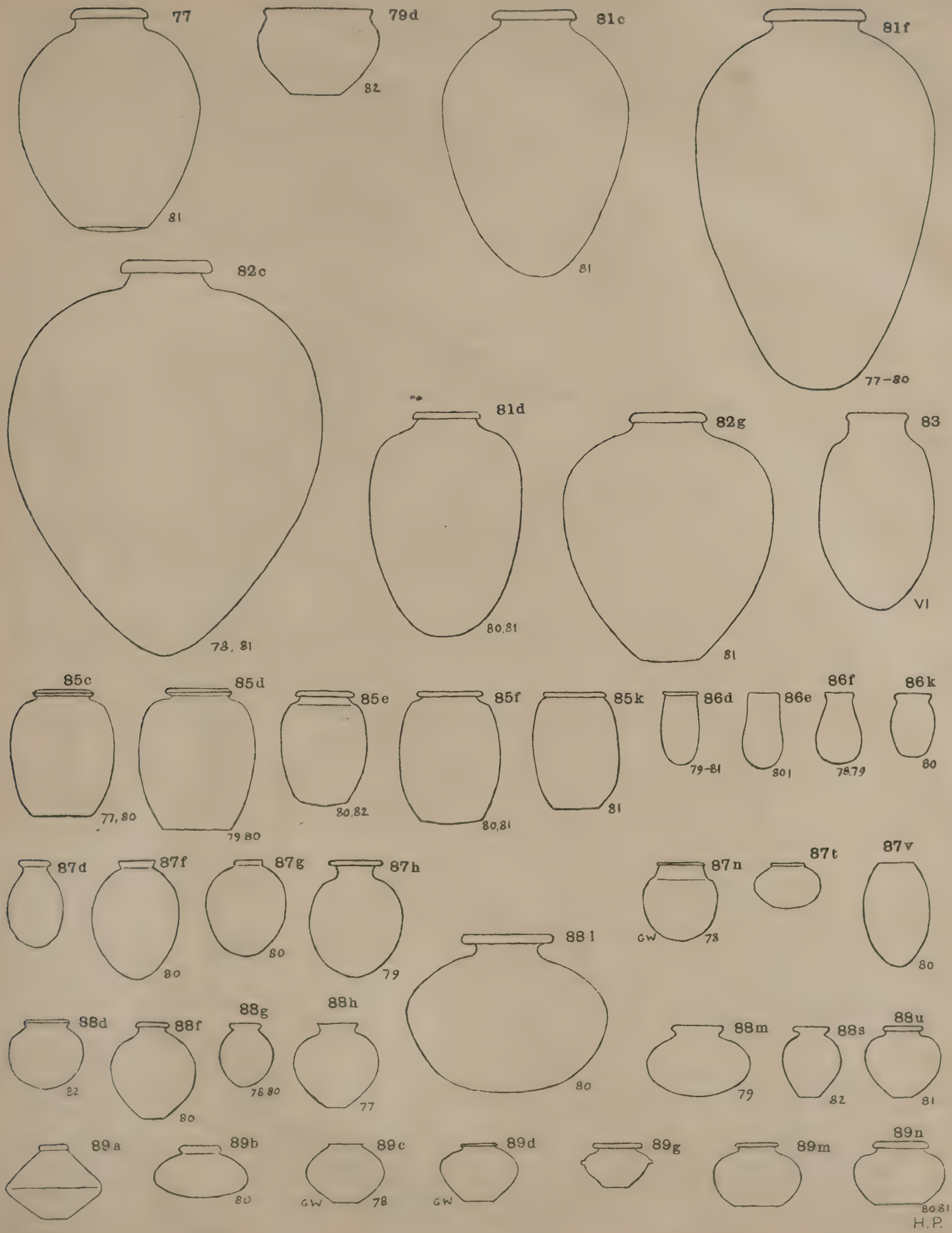
76g
76j
76l
76m
81
79
80,81
80-82
H.P.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81f
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82g
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77, 80
85d
79 80
85e
80,82
85f
80,81
85k
81
86d
79–81
86e
80
86f
78,79
86k
80
87d
87f
80
87g
80
87h
79
88 l
80
87n
GW 78
87t
87v
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88d
82
88f
80
88g
78 80
88h
77
88m
79
88s
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88u
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89c
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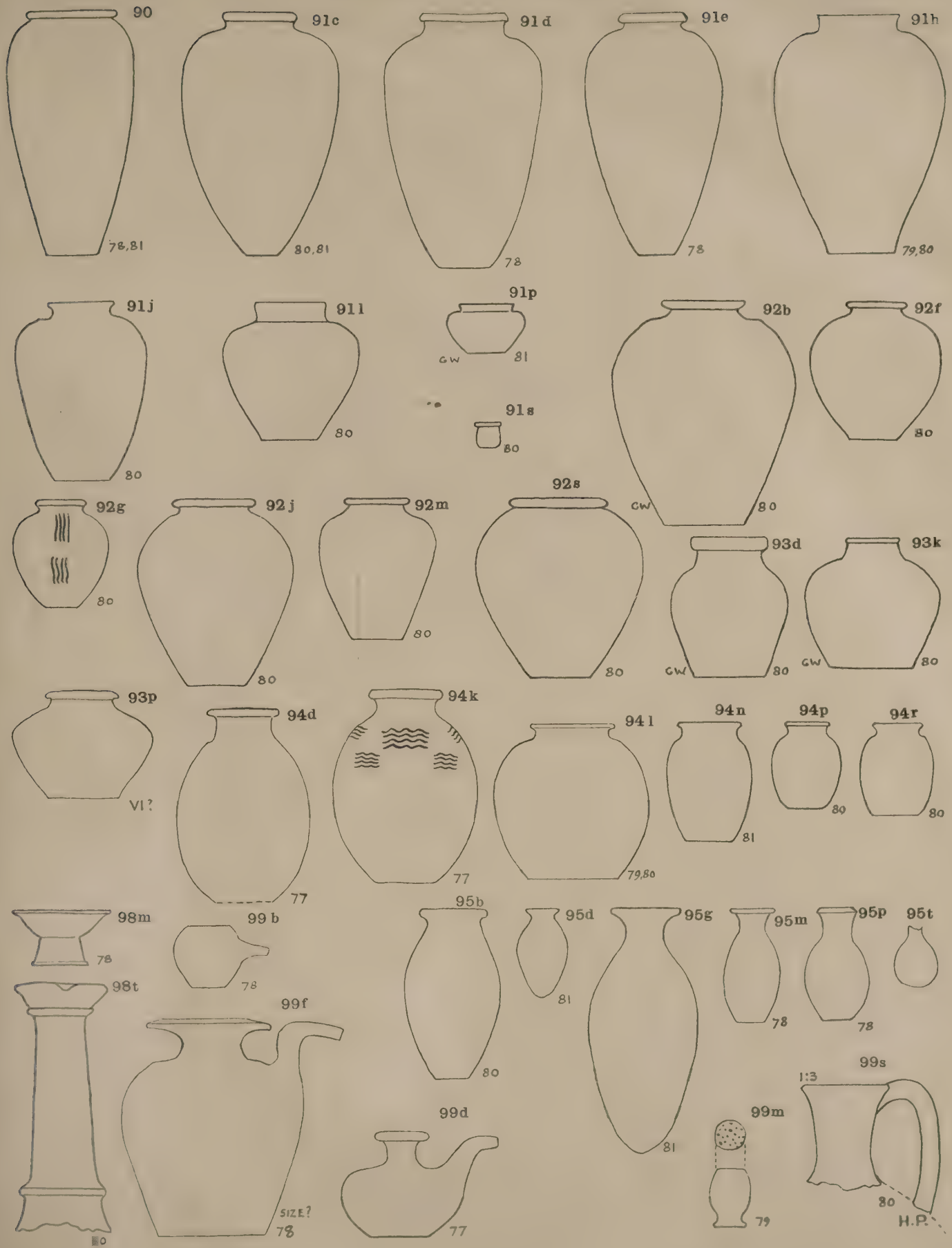
GW
89g
89m
89n
80,81
H.P.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91h
79,80
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80
91l
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91p
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81
91s
80
92b
GW
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92f
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92g
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92j
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92m
80
92s
GW
80
93d
GW
80
93k
GW
80
93p
VI?
94d
77
94k
77
94l
79,80
94n
81
94p
80
94r
80
98m
78
98t
80
99b
78
99f
SIZE?
78
95b
80
95d
81
95g
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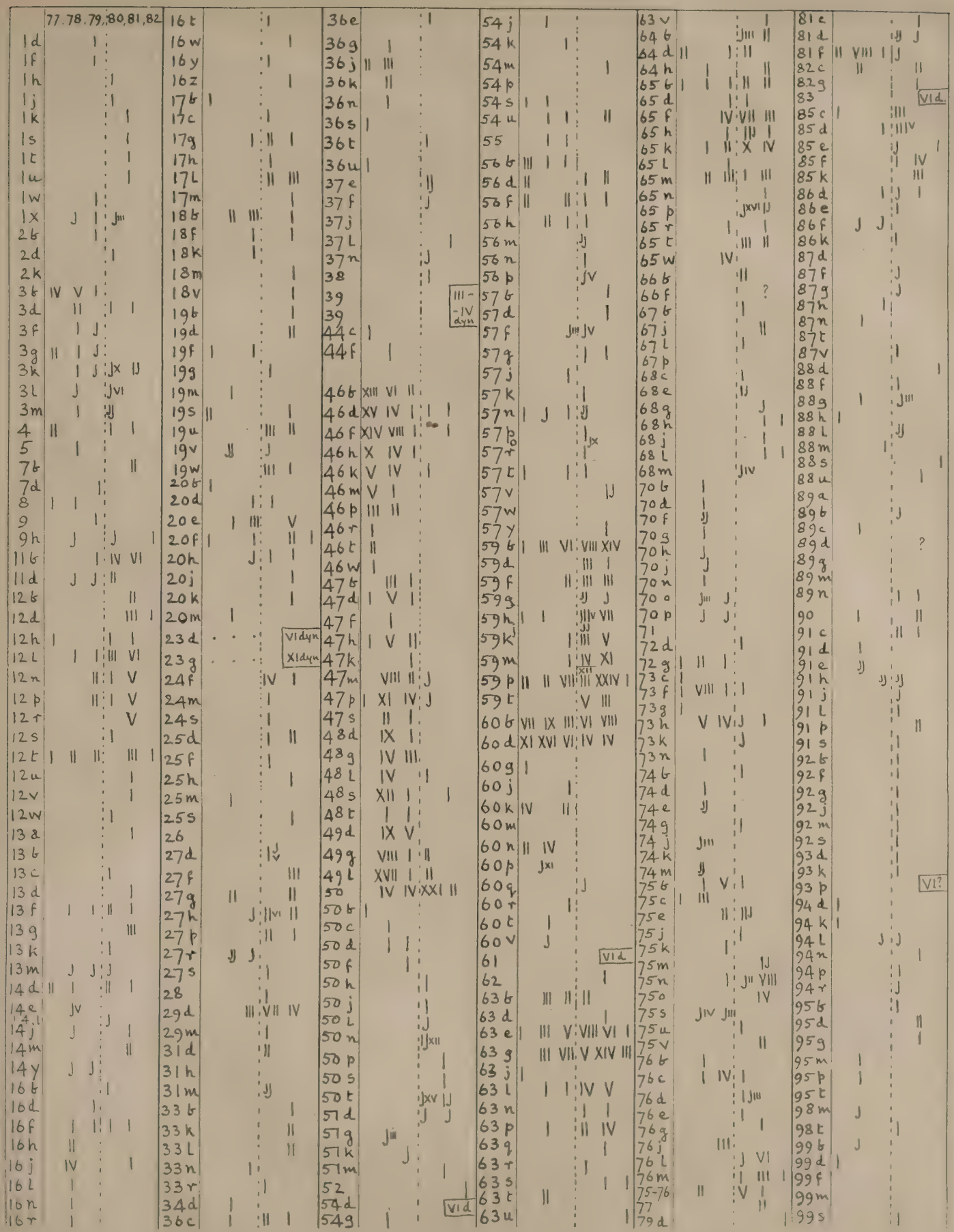
95m
78
95p
78
95t
99d
77
99m
79
99s
1:3
80
H.P.


77. 78. 79. 80. 81. 82.
VI d
III - IV dyn
VI dyn
XI dyn
VI?

No.	SIZE OF GRAVE N. E. D. FORM	BODY HEAD FACING SEX	POTTERY DISH BOWL	CYLINDER	EGG-POT SHANK-BASE	BIG JAR	SMALL NECK	FLAT BASE	STONE DISH	BARREL CYLINDER	COFFIN L. B. D.	BASKET AND MAT	BED	COPPER	BEADS	OBJECTS AND MATERIALS
6	36·72·30 S		3b	46bfk47p	59h	73f										
18	63·25·20	W	3b	46bdprw							REED					
30	FITTING COFFIN			46bfhm							52 22 24				+	GREEN GLAZE
40	50·103·55 L		12t	46b	60b											
53			3b 14d	46dhkm	60bdgk63j				24c	50d					+	SARD 2 FLINT FLAKES
57			3b 14d 20b	46b	60d											
65				46d			81				47 25·12					
71	30·70·40 S			46bdhkmp	56f60d						57 29					
73	30·60·25 O			46d	56f60bd			99d								
74	50·90·30 S		8	46bdfm	60d											SLATE
81	30·60·30 S	S WF		46b t					26d	73g	O				+	GARNET SARD GN SLATE
85	30·70·50 S		3g	46 m			81			71j	+					
86	30·60·15 S	S W F		46 f	54s				15l	71w	47·23·					SPOON
92		S W		46 k							47·24·					
141		W N	19s20f	46 p	57n-t	65b	85c				+	+				
144	45·80·46 S	S E	4 17b	50b	59b						81·39·	+	+			WOODEN TRAY AND DIPPER
183	30·70·40 S		12y 19f	46bdf		73cg			24g						+	BL.& CARN.
186	50·30·25			46d				92g								
306	35·60 33 0	M	12hy		59p60n				+			+				
307		W N F		46bd		64d					51 22·	+ +				
308	25·48·30 S		4	46b	59p						42·20·					
313	45·95·80		36jsu	46b	60d											
315	60·120·55 S		44c	46bfk	60d					51c 77d						
318	33·75·38 SL			46h				94dk								
319	25·65·35 S	RECESS		46dfh47d	56b	65				71t						
527				46dh	60bd 64				9w							WOODEN TABLE-BOARD
542	25·33·16 O	S W M		46 f	60b											
802	S			46 f	60bd	72g										
804	40·72·60 S		3g	46dfh	60d	65	88h									
1006	64·151·95 SL			46b-h		75c										
1015	52·27·30 S	S W M		46df	56d	76			11c		+			ADZES AXE		
1037	34·73·40 S			46dfh	56d 60k											FLINT KNIFE
1048	34·53·22 S			46df	56b	63e										
1055	36·68·40 SL		36j		60d										+	
1062				46dhk	60k											IVORY SPOON PALETTE

CONTINUOUS NUMBERS IN ORDER OF REGISTRATION.
DIMENSIONS OF THE GRAVES ON NORTH AND EAST SIDES AND THE DEPTH IN INCHES.
FORM SQUARE OR OVAL OR LINED WITH BRICK.
DIRECTION OF HEAD AND FACE.
SEX. MALE OR FEMALE.
TYPES OF THE POTTERY ON PLATES XLVI TO LVIII,
APPROXIMATELY SORTED IN COLUMNS SO THAT ANY TYPE NUMBER CAN BE QUICKLY TRACED OUT.
TYPES OF STONE VASES ON PLATES XXXII TO XLIV.
COFFIN LENGTH BREADTH DEPTH IF OF WOOD, + IF ONLY FRAGMENTS,
OTHER MATERIALS NAMED
+ IF BASKET AMONG OFFERINGS
+ IF MAT BY BODY OR OVER GRAVE
+ IF BED FRAME FOUND
COPPER TOOLS NAMED IF FOUND
+ IF BEADS FOUND
MATERIALS OF BEADS OR OTHER OBJECTS FOUND IN GRAVES.

No.	SIZE OF GRAVE N·E·D·	FORM	BODY HEAD FACING SEX	POTTERY DISH BOWL	CYLINDER	EGG-POT SHANK-BASE	JAR	BIG NECK	SMALL FLAT BASE	STONE DISH BOWL	JAR	COFFIN L· B·D·	BASKET AND MAT	BED	COPPER	BEADS	OBJECTS AND MATERIALS
7	47·92·70	S.L			47bhkm48ds49dl	60n	73h		81f			51·25·	++		AXE		‖ MARK
8	26·44·	S.L	S W M		46b 48d 49l	60b							+				SLATE
9	35·65·40	S.L			47p 49g		73f					+					
10					48ds						51p	60·30					
15	50·93·60			13c 18b	46h47df		63l		81f								
16	68·96·75	S		3b	46f47dhms48ds49d	59h	73h								+		COPPER BOWL
20	55·105·60	S			46dfhp47m				81f82c	12b		+			WIRE	{	WOOD DAGGER ZEBRA·
27	28·70·65	S			47p48dl49g	60bd	73h	75c				48·25·28					SCARAB CASE
36	80·126·65	SL			48s	60b	73h	75c	81f		51g					+	CARN· GROUPS ‖‖ MARK
37	48·98·50	S		8 36kjn	47b	60d	70g	73f		6m		48·23·			ADZE		
38	60·105·50	S	S E	36j	44f46bfh47b	60d				14de	52g	72·41·					
39	65·137·53	S	S W	3b	46bk47p48dgs49d					6j 11d29n	51v54n				ROD	+	GARNET CARN·
41				3b 25m	48s	60d	63g					52·22·12					SQUARE PALET
42	45·100·60	SL		14d	49l			75bc			64c	47·21·	++			+	GARNET GALENA
43	41·93·40	SL		3b			64h		81f			+					
103	70·115·55	S		36jk	47p	54j				13g23f	54n				WIRE		
119	45·70·35	S	N W F	16n			63					TRAY					
121	30·50·40	S	N W F		48d		63					BASKET				+	
128	50·75·65			12t 13c		59b											
188	33·65·70	S			46b 47p	59b						+					
196	60·47·50		E S M		46f 47p	49l	60b				78m81f	O					
197			N W M	3b 36g	46f	50	63	65m	70d73f 88g95mp							BL·	
211	31·64·36	S	N E	3d	47d48d49g	54g	60dn		90		78p	56·23·4½					
252	39·60·42	S	N E M	19u	47f		60b	63e	65km			O					
260	41·66·48	0		19m36c	47d	49l	55	59p	60d	17k	71v	+				+	CARN· GLAZE
261	33·72·36	S			47h 48g49l	50	63e		81f91d		70d						NAME OF KA
262		0			49l	60b				18ks							
264	26·48·40	S			47m 49gl		63e							+			
266	66·41·43	S			47p48t49l			75-6									
267	31·54·58	0			47m 49l	60bn											
268	41·56·45	S		34d	47hp48dl		60n										
274	35·52·54	S			48g49l	60d											
275	42·64·45	S			48s	56h59b		73f									
276	32·60·63	S			48l49dg			73f									
305	48·60·50			16r	48ls49dg	60d	63p		81f								
314	40·65·40	0	M		46bf47m 49l			73f	82c								
317	40·70·45			16fh	47b	54s	60d										
322	30·80·60		S W	16j	47p48g49gl	60d		73h	81f								
324	35·70·50	S	S W M		48s49dg	60d		74b				+					
325	30·80·45	S		16hjl	46f 47d	60d						76·30					
336	40·70	S	S W M	16j	47p48s49dl	56h		75-6				+					FLINT KNIFE
408	38·36	0	S W		49dl							+					
412	61·125·60	S	N E M	3f	47m 49l	50	56b	60d	72g73f						CHISEL		TAHUTIMER
414	66·140·71	S		3dg5	48s49l	50de	60d	70n	72g76bc	8ep	51r						NARMERZA
420	47· 60·60	S	N E M	20m		59b	60b	65b				+					
484	53·97·60	S		3d	46dh47ps			70b	73f								
1021	21·25·38	0	S W M	12t 13f	20e	54u	63gt										
1023	63·141·66	S			46dfp47h	60bdt				{ 11c 14t15g	50l51jl	77d			+		IVORY SPOON CARVED
1041				3m	47h					{ 17f 19cd							IVORY GAME
1046	47·71·63	S		12l 16j	18b	60d	63gt		87n89c								
1047	27·50·13				46d47m 48s												SQUARE SLATE
1059	23·117·60	S			47m 49d										CHISEL		

No.	SIZE OF GRAVE N.	E.	D.	FORM	BODY HEAD	FACING	SEX	POTTERY DISH BOWL	CYLINDER	EGG-POT SHANK-BASE	JAR	BIG NECK FLAT BASE	SMALL	STONE. DISH BOWL	JAR	COFFIN L. B. D.	BASKET AND MAT	BED	COPPER	BEADS	OBJECTS AND MATERIALS
15	118	94		L							70j		88g								
17	26	43								60d	70f					MUD					
19									47p 59h						19c	POT				+	
25	33	73		L				3f	50d		70g										
27					SW			36g	47p												FLINT FLAKES
30	22	31							47p	60p						MUD					
34	37	55		L					47p	60p	70p										
36	33	57		L					46h 47p	60p											PALETTE
38	27	51		L					47p		74j				19c						
42	51	94		L				3k			70g		91h								
44								36gn			70fg										
47	20	31							47p	60p	74m					MUD					
48	42	63						36gn	47p												
49	22	35							47p	60p						MUD					PALETTE
53	49	95		L				3k 30g													
54	29	31							48		74j 75s										
57	30	39		L					47p		75s				19c	MUD					
58	31	43						3fg	47p	60d						MUD					PALETTE
64	47	63		L				3f	47p	60p	75s		91e	14b		MUD					
84	35	39			NE			13m	47p											+	PALETTE 2 IVORY PINS
89	43	51							47p		74j 75s					MUD				+	
90									47p	60p											
91	39	63			NE			3f-k 14e	48				88g								
95	30	43		L					47p	60p	71m					MUD					
99	39	71		L				3g	47p	60p											
101	23	39						3f	47p 48		70h										
109	57	39							48	60p											
110	35	27			NE			3f		60p									BOWL		FLINT FLAKES
113	33	39						9h 14y	51g		70o-p								+	+	IVORY RINGS
117	35	55			NE			3l	47p							MUD				+	
120	20	29			SW				47p 51g	60n											
131	26	28						3fg	47p	60d						MUD					
139	28	37			NE			3l	47p				86f								
158	26	43			NE				50d				88g			WOOD					
159	31	45							50d 51g											+	PALETTE & GRINDER
162	43	67						3k 14j	47p	57n											
164				L				14e	47p	60n	70o-p		91e	14b							
172				L	NE				50d	60v											
182	25	43		L				14e		60n	74m					MUD					
204	43	98		L				3f 14e			70o										
205	24	45								60d n			91e-h								
215					WN			3k 19v					95p 98m								
236								1x3f	50d		70g										
241	28	40						3f		63g	74e										PALETTE
266	55	63								60d	70a-p					MUD					
273	35	51						3g 14e 27r	50d												
311	27	37						19v	50d	59p	74e		90								
356	33	51			NW			3l 11d	50d				91d								
403				L				3m 27r	50c				90								

No.	SIZE OF GRAVE N. E. D.	FORM	BODY HEAD FACING	SEX	POTTERY DISH BOWL	DISH CYLINDER	EGG-POT SHANK-BASE	BIG JAR	SMALL NECK FLAT BASE	STONE DISH BOWL	STONE JAR.	COFFIN L.B.D.	BASKET AND MAT	BED	COPPER	BEADS	OBJECTS AND MATERIALS
1	41·74·36	S			17g 29d		59 hkm 65d flm w					62·26 TRAY					
5	33·85·40	S			18k		56 bh 59		76j								
12			S W	M	12t 18b		54k 63		85 89h								
19	45·92·55	S			3b 47b 49dg		73h			19j	73h	+				+	CARN·LAZ·GOLD
21	66·82·40						73h										IVORY SPOON, KNOBS
52	55·90·50	S			26, 9, 27b	50		76c		25j			+				SLATE
54	40·80·50	S	W N	F		50f	63g	75e 76c					+	+			ROUND SLATE
70							60b		87h			53·21					
108	40·92·120	S				55 60d 63ge		76c		13p		68·25·20					
111						59b					54n						
116	40·60·45	S	S W			59f						40·20 TRAY					
125	35·76·45	S	S W		7d 33n	59p			99m			50·15·22	2				
140	40·65·50	S	S W M			59p						TRAY	+				
147	20·70·50		S W M			59b						TRAY	+				
151			S W M			59b								+			
156	60·70·40	S	S W		18b 29d	57n 59p 63g 65k							+	+			
157	70·80·70	S	S W	M		59mp 65bw		76c				40·20·20	+	+			
161	30·65·55			F	12n 13g	59b 63g			85								
166	25·50·40		N W			59b						TRAY OF 308 BRANCHS					
168	42·85·65	S			48gs 50 57j	63g 65fh											
172	30·70·40	S	S W	F	1f 29d		65k		85d			50·24·15		+			
175	55·120·50					59b 65w						53·18·15 43·12·10					
179	45·70·75				11b	59p											
N 195	45·41·47	S			1d 46bf	56f 60k 63g		75e									2 SLATE
201	24·35·46	O	S W		18b 27g	57t						O BASKET					
203	36·48·60	O	N E		12n	59b						37·14·10					
228	41·49·53	O	S W			59p						O BASKET					
278	56·32·14	S	W N	F			63e 65mr										HORN SLATE & IVORY ARMLETS
279	29·62·36	S	S W	F		59p 63e							+				
290	68·42·36	S				60b 65f											
291		O	S W		19f 20f		63										
292	38·60·60	S	S W	M		49l 50 60d				6h							
304	35·70·40				16f 47p 48g 49d		60j	75kn									
327	35·55·40	S					60d 73f		81f								
*336			S W	M		49	60d							+			SLATE
402	24·59·48	S			16d		65m										
404		L	N E	ch	1x		65w					MAT LINING	+				
411	30·39·58	O	S W	F	1w		60b										
423	36·58·41	S				59m 60d											
474	48·84·72	S			18f 46		60dk			14n	71l				SPEAR HEAD		IVORY SPOON
501	28·60·48		N E	F						14k							SNAKE SPOON
1003		S			13f						62e						ROOF POLES
1005	37·71·24	S	N E		12l 20d	54u	65f					BASKET					
1009	32·49·49	S	N E		12t 20e		63gl				78l						
1010	32·57·63	S			20e		64d										POLE ROOF
1014	34·40·20		N E?		20e		63e						+				
1045	61·103·100	S			47h		63e	75-6		9hj	21mw, 55f, 62p						
1049	25·70·40	S L						75b								2	BLUE CYLINDER
1052	52·103·60	S				49d 59f 60r		73h 75b 76j									
1053	54·140·67	S			46d 47bd mp 49d	56f 60d		73h 75b 76j									FLINT FLAKE
1054	57·192·65	S			47h			75b		7c 18f, 19h							
1061	66·175·70	S			46dh 47kmps 48dgt 49d			72g 75b							STRIP	7	IVORY SPOON DRAUGHTS MALAC GALENA

TURAH, JUNKER.

43			N E			47p		75e	91h								
122	27·39					57f		70op	91h								
177	39·68	L			26 3k 11d	47b		75s	86f								
186						50d 59b		75s									
193	22·37	L			26	51k		70op	76c 90		24l						SHELL
197	49·69		N E		3g	47p		75es									
216	43·59				3f 11d	47p 51dk											
222	55·79				3k 11d 46h										HARPA SHEET		
223	47·87	L			14y 27h	47p											
230	39·61				27hr	50d 59p–63g											
288	37·71		N E W N		3k 27h		63g										
293	35·67	L				50d		75e		19c, 24l 52b							
307	43·25				3k					13p		+					
335	35·47				3g	57f 63g							+				
361	22·37				13m	57f											
470	22·51					59p 65w					64g		+				

No	SIZE OF GRAVE N·E·D·	FORM	BODY HEAD	FACING	SEX	POTTERY DISH BOWL	CYLIN-DER	EGG-SHANK	POT-BASE	BIG JAR	SMALL NECK. FLAT BASE.	STONE DISH BOWL	CYLIN-DER	BARREL AND SQUAT	COFFIN L·B·D·	BASKET AND MAT	BED	COPPER	BEADS	OBJECTS AND MATERIALS
2	22·48·16		S	W		29d			65tk		85c					+				
55	25·45·20					19u 36ce	50										+			
60	65·80·40	S				27h					91s	23f 24e j r	IVORY 53g		TRAY					3 FLINT ARMLETS
62		S	W	N	F	27p 36ct		59f	65f						+					GALENA
80		S	N	E	F			63 Lp			85f	14d, 22b, 42k		77m 78ekm, 81t				+	+	GARNET, CARN. & RYMER
91	45·60·50	S	S	W	F			59k	65k											
93								59k	65t		85c									
98									65t		85d 89n									
109	50·135·100					16f 20d	50	59t, 60d, 63l, 64d		75-6			53d 55c							
112	45· 65· 55					2d 19u			65f			11d, 13l, 20p		62c 71e 77s		POLES +				
113	40·85·55	S	S	W	F			59ht	65f	75-6	85c				55·20 TRAY					
118	65·110·65							59b		75-6			22d 23k	55n 71c	O				+	FLINT KNIFE
123	35· 80·60		S	W	M	17g		57k 59h			91c 92j				60·25 TRAY					
127	50· 80·50	S	S	W		12h, 19w, 25f		56d, 59p, 60b, 65f		75e					65·30·2 TRAY	POLES +				
129	50·80·60	S	N	W		27h		59p 63e				17d			65·28 TRAY	POLES +				
130	50·75·60						50	59b 63e 65k				7s								SLATE ARMLET.
135	30·65·55	S						63e												
137	30·75·40	S									85d	8t		54y					+	
138	54·70·60	S				12l 29d		59d 60d 65f											+	
142	40·80·40	S				12n 19w		59h 63b 65k								+	+			
143	65·90·50	S	S	W	M	11b		59t				9p 24j			50·40 BED	POLES +	+			
145	40·75·50	S						59p 65f km							TRAY	+				
149	55·85·50		S	W	M	11bd, 16t, 36s		63e, 65bk		75-6		8v	53l, 54d, 55k		70·30 BED	+	+			8 FLINT ARMLETS
153	50·85·90	S				12w 29d		59d		76m	92f		26l	77s 81r	TRAY					
154	40·70·50	S				29d 33r		56n, 57q, 59b			92m 94p						+			RUSH ON WOOD
170	90·45·70	S	E	N	M	3k 13ad 16y		58h, 57p, 59k, 63e		75-6	86k, 88f, 98t		29n, 51w, 54hj, 56n		55·19			ADZE	+	BONE AND CARNELIAN
171	40·80·60	S				11bd			63b			14h 24n				+				WOOD SPOON
174	55·38·40	S	W	N	ch	14d 29d	50h		65f								+			
177	45·90·60	S				11b 13f			59m, 65k				22v 52d		+					
187	50·80·70	S	N	E	F	17g 20h			66b					62g 78h 80c	+					
192	50·80·90	S							59m, 63g, 67l					62g	44·22·17					
s195	34·61·47	SL	N	E	F				63n			9b 13m		62pty	33·18					
198	25·50·60	O	N	E	F	19u			64d					78g	BASKET					
204	60·80·36	S	W	N		27d		59b	65k		87v	9f	22v 54v		REED		+			
230	60·90·54	O	S	W		12l 16b 46k		59mt	60b 63l	74d			23t	62g 77k 81n	+					
257	17· 28·18	S	S	W	F	25d		59bdf			85d				?·20·					
258	30· 53·24	S	S	W	M	12p 17l 14d 29dm		59f							+					
281	30· 58·24	S	S	W	F	29	50		60bd						41·19 TRAY	POLES +				
282	21· 43·37	O	S	W		24s			64d						O					
284	46· 84·60	S	S	W	M	13k		50j	59t 65k		95b			56k	53					
287	28· 54·37	S	S	W	M			50t	66b		92s				35					
295	34· 60·32	O	S	W	F	29d		50n	63gr								+			
296	40· 60·42	O						50	59m											
298	36· 66·60							50				14b								
300	45· 90·70					19w 27p 38r			63l											
312	31· 50·41	S						46d 50		74g					BOARD LINING					2 SLATES
401	29· 48·48	S	S	W				50	60b						BASKET					
407	35· 62·72	SL						49l 50												
410	70· 39·36	S	W	N	F	17h 24f 31			59b							+				
415			S	W	F			48l, 49l, 50					14s	61l 72c	33·19·				+	CARN·CRYST·AMETH SLATE
417	60·38·43	S				3d 24f 31		50	59b 65						+					
419	39· 60·44	S						50	63e, 65h, 72						O		+			BED OVER BODY. 2 SLATES.
421	34· 60·39	O	N W / S W			17l 24f			65b						O					
422	72· 34·50	O	W	N		24f		50	60b						O					IVORY ARMLET.
477		S	S	W	F			49g 50	60d						42·20·12					
523	50· 64·49	S	S	W				50							+					
538	40· 72·58	S	S	W	M			50							47·26·11		+		2	
544	37· 62·24	S	N	E				50	63p 73f							+	+			WOOD BOWL
900	35· 57·40	S						50	65h						TRAY	+				
902	35· 50·20	S	S	W					60b 65dk								+			
1013	20· 29·35	O	S	W	ch	13f					91l		42f	61k		+				
1026	45· 63·44	S						49g 50		75be		6g 18h		51n						SLATE
1036	30· 43 58	O	N	E	F				63e											
1044	24· 44·16	O	N	E	M				63eg		87v					LINING +				
1056	40· 32·30	R	N	E	F	27s 28			63g						PAPYRUS BOX					
1057	52· 16·26	R	N	E	F	12l 20d			63g						PAPYRUS BOX					
1060	102·186·89	SL				4 17c 24m / 12d 19g 37e		50t	56f 59h, 67b / 57rt 64d 68ce	75 j ou	91c 93dk / 76deg 92b 99s	8g 21g 53k 62nu / 9hry 29hj 54l n prvw								

No	SIZE OF GRAVE N·E·D·	FORM	BODY HEAD FACING SEX	POTTERY DISH BOWL	CYLINDER	EGG-POT SHANK	BASE.	BIG JAR	SMALL NECK. FLAT BASE.	STONE DISH BOWL	CYLINDER	BARREL	COFFIN L·B·D	BASKET AND MAT	BED	COPPER	BEADS	OBJECTS AND MATERIALS
169				27h 31m														
174	41·61·		SW	3k 27h	47p	56p	59p											
179	35·83·	L	NE		47p		60d	73h				72eh	POTTERY				+	IVORY PIN PALETTE
181	43·57·		SW				63g	75e	81f, 86d				WOOD					
329	40·55·			27d					88l									
337	31·47·		SW		50t	57ofn	63g	65t										
338	27·67·			1x 3k 20h	50t	59p		65t	91j	19l	27g							
341	40·60·		NW	3k	50t			65t	91h								+	
342	35·51·					57o	63g	65t										
343	39·47·		E	3k		59h, 64b, 65p												
357				3k	50t	58p	59p	65t					WOOD				+	
363				3l 27d	50t	59g												
364	41·59·	L		3k 14l		57f		65p										
365	39·35·			3l	50t		59p	65k-t	76d									
366		L		3m	50t			65t	81d					MAT SIDES				
367	28·49·			27d	50t	57o		65t										
369	18·25·			3k 27d	50t	57o		65p					WOOD					
371	24·39·		SW	27h	50t	57f		65t										
372	33·79·					58m		65k-t	76d 81d 91h	25c	27g	54n						
391	35·63·		NE	27d	50t		59h	65p										
417				3l	50t			68e	75n									
435				3k	50n	56p			85d									HORN ARMLET
438				27h	50t	56p, 57f			85d, 94l									SAME WITH COPPER TIE
442	30·63·		SW	1x	50n			65h	85d, 88g					+				
455			SW	27d 37e	51d		57o	64b	87g 88g									
456				1x 3f	50t			63g, 65k					WOOD					
460	27·35·				50l					24l		64h						
469	31·49·					57n	59p		87f, 88g	24l		61j		+				
477					50t	57fo		65p						+				
487	31·43·			3l	50n			59p				54v						
490	33·39·				47m 50t		57 o											
494	31·33·					57o, 59g,		65p	85d					+				
495	35·67·		SW	3k 27h	50n		57v, 59h,	65p										
496			NE	13m	50n			59p										
498	41·71·					56p		65p										
500	37·71·	L		3l 19v				65p	75n									
501							59p	65p	88l									
502	51·67·			3k			59p,	64b,	65k									
503	23·39·		SW		50n							54v					+	IVORY VASE
505	23·39·				50n	56m		65kp										
518	16·27·	L	SW	3k	50n		59h		85e		24l							
525	33·71·		NW		50n		59h	65kt	76dl		24l	54n 61l						
539	39·55·		SW	3k	50n		59p	65p	76d-l	13p, 14b,	27g	54n 61l						
543	33·53·		SW	3m	50n			65p		9t	24l							
548	39·59·		SW	3l 19v		57o		65p										
549	67·86·	L		27h 31m		57o		65p	85d, 94r	13b p								
551	35·75·	L		1x	50n			65p	76c									
573	373·630·	L		37e			59p	68m										
575	45·59·		NE	9h				68 m								FIVE BOWLS		
576	45 59·		NE					68 m	89b									
577			NE	37f-n			59j											
578				37f-n			59j p	68m										

No	SIZE OF GRAVE N·E·D	FORMIE	BODY HEAD FACING SEX	POTTERY DISH BOWL	CYLINDER	EGG-POT SHANK-BASE	BICONICAL JAR	SMALL NECK FLAT BASE	STONE DISH	CYLINDER	BARREL	COFFIN L·B·D	BASKET AND MAT	BED	COPPER	BEADS	OBJECTS AND MATERIALS
4	42·81·36		S M					85f			77q					+	
58	45·87·60	s		12bn		59p 73h								+			
59	30·60 40	s		27h		59bh 67j								+			
61	35·60·30	s	WNM	11b,14md,27f 32		57d 59b 60b 65k			14b		72g			+		+	GREEN GLAZE
63	32 55·40	s		12dr 33b		63p 68h					62g 78p	+					
64	40·70·	s	NW	27h		60b,65k,67j			23t					+			
82						67j			21t								
88		0				59k					78l"	BASKET 34·20·					
89		s		7b		59p			12d 23v		62r 81t	28·				{	SAUCERS WITH BURNT CHARCOAL
90	50·80·70	s	SW	19u		54m 59h		76l 85f					+	+			
97	26·41·20	s	SW	12r 17gm 31d									COVER	+		+	BLACK
100	80·105·70	s	S F	12n		59hk		91c			72f	TRAY	+				
101	80·110·75	s				59hmp 65f 75n			{9t 21e 23p} {13r 22p 29n}		54lt,62pw	+	+				
105	21·35·48	s	S	12np,13d,17l,19u,27f		60b		85f				BASKET	+				
107	30·80·45	s			36c	59p					62h	TRAY	+				
110	50·70·50	s	NEM	18m	48s 50p	59h	75no	94n				57·46·					
115	32·60·70	s	SWF	12n,17l,19s, 27m		56f,57v,65fkn	75no		22p			35·20·17					
117	55·80·70	s		1k,2,13g 27p		59d,63d,64	75no		8x,13hl,21p,22l,23p		53d,55c	60·18·14			+HORN ARMLET	1	IVORY BULL LEG
120	50·60·40	s		29		57g,60b,62,64h,65f		95d				40·25	TRAY	+ +			SCARABS IN POT
122	52·80·120	s	M			57b					60f	50·24·15			ADZE		
126	45·65·55	s					76lm		7g 21d 25c			40·25·9				1	SLATE
131	37·75·40	s		1s. 12d,13a,18v							78s	35·20·					FLINT KNIFE
132	50·75·45	s		1stu		59p 65m						35·16	TRAY				
136	50·80·65	s		11b 12bru 19d		59p	75v 77					45·20·10		POLES			WOOD STOOL AND DISH
146	25·50·45	s	SEM								77q	O		+	40 x18		
148	50·140·80	s	SW	7b 12l 16z 33l		59k	{75mn 76qL					TRAY					
150	45·65·50	s	SWM	12t		59bhp,64h						30·20·10					
158				11b 12p 33kl		59bfkmp	76l	81c									BROKEN TRAY
159	30·50·50			19bd 27g		59fp			34								
160	65·100·80	s	SW	16f		63v 65t			24p			47·25·19		POLES			
162		s	SWM	29d		59b 65b	76	86d			78h	+					
163				3d 29d		59bp					81hv	TRAY		POLES			
165	50·80·65	s	S	11b 12,br 14m		59bkmp	65m 75no		27k	54t,62r,63h,77n,81t		TRAY					
167	35·65·25	s	M	3k		59 p				61c		30·20·15					
169	90·160·80	sL		11b		58d 59bpt	63e 75nv 76m 77							‡			SANDAL TRAY, SLATE FLINT KNIFE
173	30·65·25	s	WNF	20f										+	2		
176	45·85·70	s	SWM	11b,19w,20f,25h 33k	50s	56d 59hmp 65pt	75n		12g 22j 31			45·18·11					FLINT KNIFE
178	55·80 70	s		12d		59bp,65h	76l	85f	14v,22d,25m	31	56d 78h,80f	39·24·15				BL	
180			ESch						14m								
189	30·75·50	s	SWM	12p,17l, 27p		59bp 65m	76l				81bk	39·23·23					
191	40·50·40	s	NEch	12p 38		63l			42p	62h,77q,78g,81v		24·13 BASKET					
194	36·50·55	s	NEF	20k		63e				77n,78s	81v	+					
199	30·55·40	s	NEM			59f			22l								
200	31·48·48	0	SW			59p 63n		89n			78h,81hv	REED BASKET				gl	
202	32·41·48	s	SW			59b			23c			+	+				
212	37·65·67	0				59bp 63g	75-6		19s 21p		53c,54n,60b,62r,77hq	50·18·18					FLINT ARMLET
213		0		14j		59bpm 60b,63e 65 65r	75o	95d	9dy,13f,22f 24rv		62s	45·25·24					SA BOX
219		0	NE			60b			8n9v10L		62egh 76h78m	32 19·					
231	36·60·60	s	NE			59mt 60d			8k 24t		62ehl,63m78ru	+					
238					37l	68hlj				42g 62c	81t						
240										42d,61h,62k		+					
249	39·63·38								8r 22j		62w	36·18·					
250	26·57·42	s	NEF	3k 16wglazed		60b		90	5.7k, 22m		62w 73d,78ht	38·16·13					
269		s	WNF			65			8k 18t		72b				+HORN ARMLET	+	BLACK, BLUE AND WHITE BEADS 4 SLATE, 1 IVORY, 1 HORN ARMLETS.
280	24·39·34	s	NWM			59b 64h					81t	RUSH BOX 30·12·					

No.	SIZE OF GRAVE N·E·D·	FORM	BODY HEAD	FACING	SEX	POTTERY DISH BOWL	CYL. IN. DER	EGG·POT SHANK-BASE	BIG JAR	SMALL NECK FLAT BASE	STONE DISH	CYLINDER BARREL	COFFIN L B D	BASKET AND MAT	BED	COPPER	BEADS	OBJECTS AND MATERIALS
283	33·60·27	s	SWM			24f		59 60d		88u95g	22n27c	54n 62p		+				
294											21n							
297	34·72·96	o	SWM					59kt60d64h		76m82g90	23t24l	54b						
301	52·65·65		NW					63q			22t 25s	78n80t						
403	34·48·48	s				13g		60b										
481	39·77·54	s	SW			12n 29d		46af 59b,60d,65k				77q81kt						
512	52·48·58		recess								9n 22y 23k	61p			+			
1000			S			20e		54 65k			22x 23r	80mt81l						
1002	35·64·40	s						63gl64d			10p14p25p		OVAL POTTERY BASKET					
1008			recess	NE								81p77gm578em 78m						
1011	53·46·36	s	NE	ch		12r 20e		63e						+				QUARTZITE GRINDER
1012	33·58·50	s	NE	M				63g			42f	81v				CHISEL	BL	
1016	38·59·39	s	SW	M		12t 20h 25d 51m		63gl			13b	62gh 81dt		POLES				
1017	35·55·48	s	NE	M		13g		63el			5 13r 22h	78cmp81rt						
1018	26·33·63	s				12l		57y			13k							
1020	30·60·78	s	NE	M		12t		59p,63g			24v	62g77m78gr81t						
1024	36·67·72	s	SW	M				59p 63g			6r 13t,22v,24v	62h,78p,81hr						
1025	40·63·37	s	SW	F		13f 20e 25d		54u 63gl				54f62e7iy77u781						
1027	32·52·65	s	NE	M				63p			10d13p	62hv781 81r						
1028	30·54·82	s	SW			12v 18bf				85k		80p81r	POTTERY 29 10·13					
1029	37·61·59	s	NE	M		4		59m63gp			5,6u,8c,22l24t	62q77q78mnf						
1031	38·54·75	s	SW	M		12l		59m63gp		82c	6f 19t,21p							
1032								59m63s				61d,62b 81r						
1033	37·49·36	s	NE	M				63g			6u	78n81x						
1034	43·89·79	s	SE	M		12hlp 27f		63gq		85k91p		23h 62g,63d,78s80h81k	knrt					
1035	28·52·30	s	SE	M		12l 16j 20e		59p				81m	CLAY OVAL					
1038	29·55·67	s	NE	F		20j		59p 63eg				23p 62p 64f 81ht						
1043								59p 63g			13v 24pt	71r80p						
1070	32·54·36	o	NE	F		12l 20e25s		59p 63g		85k91p			OVAL POT 27·20					

TURAH, JUNKER 81

344	59 163·	L						50t 59p		75n76lm								
370	24· 35	L				13g		51d		65t								
377	30·43		NW			3k		57v 65kp				13p						
423								63g68g		76l								
474	47·112	L						59gh		76l 81d								

NAGA ED-DÊR, REISNER 81

1512	84·96·72	L				12t,14j,18k,20e		59p 66b		75p								SLATE ARMLET
1513	128·108·66	L	SW			12n		56f 57np 63		82cg	13k,14m,s,24p 54w 60b 78hmp					AXE ADZES CHISEL	+	" BLACK + WHITE CYLINDERS
1514	115·108·120	L									14b 18d 42f 55k 77dq 80h							
1522	POTS UNDER A STONE					16z		33l 59hm		82c		80h						FLINT KNIFE
1525	78·99·102	L	NE			19u		57d		85e								
1532	82·63·70	L	SW			17g19u		59bkmp,63s,65pt,76g,77		94p			MUD BOX POT BOX					
1581	138·92·120	L						33kl 59np		75np		23p 54t					+	GOLD SHELLS CARN.SERP GLAZE
3016	56·46·	L	SW					56df 59dh 63 66b				52d 54b						FLINT KNIFE
3017	96 72·110	L									19g 25c 54lnw 60f 62nt 78ck					TWO CHISELS		
3031	112·90·108	L						59h 63s 67j			13k 20p	60b 61p 62eh 80h						
3150	NO GRAVE					13h					14m	60f 62s 77k78p81hp						
3052	58·35		SW								13h 31	77q						
3061			SW								19ct 54t							
											22v	78p 81pt	SQUARE POT 37·22·21				+	CARNEL. BL. GLAZE SHELL BEADS

TARKHAN 82

24	40·80·72	S	NE					68h			6q 23k	77k78k						
155	30·65·40	s				12d 20f		63go		76m								
181	38·50·20	s	SW	M				68l							+			BED 38 LONG
1019	35·56·65	s						63gsu			2 19c 23r							
1039	23·40·27	o								79d85e88ds	13r20g	81t	BASKET					

JUNKER, TURAH.

POTTERY

JUNKER	CORPUS
I	75 s
II	74 j
III	74 g
IV	74 e
V	90
VI	74 m
VII	75 e
VIII	76 c
IX	76 d
X	76 l
XI	75 m
XII	60 v
XIII	73 k
XIVa	60 p
XIVb	60 d
XV	60 n
XVI	60 q
XVII	74 k
XVIII	91 e
XIX	91 h
XX	91 j
XXI	81 a
XXII	59 h
XXIII	81 f
XXIV	59 p
XXV	64 b
XXVI	63 g
XXVII	65 k
XXVIII	65 p
XXIX	65 t
XXX	56 p
XXXI	57 o
XXXII	57 f
XXXIII	57 n
XXXIV	94 n
XXXV	57 v
XXXVI	88 l
XXXVII	94 l
XXXVIII	85 d
XXXIX	85 e
XL	88 g
XLI	94 r
XLII	65 w
XLIII	56 m
XLIV	91 d
XLV	87 h
XLVI	88 f
XLVII	95 p
XLVIII	59 j
XLIX	59 g
L	59 h
LI	68 e
LII	68 g
LIII	68 m
LIV	70 p
LV	70 o
LVI	70 j
LVII	70 g
LVIII	70 h
LIX	70 f
LX	50 l
LXI	46 h
LXII	46 m

JUNKER	CORPUS
LXIII	46 p
LXIV	47 p
LXV	48
LXVI	50 d
LXVII	50 c
LXVIII	50 n
LXIX	50 t
LXX	51 d
LXXI	47 m
LXXII	51 g
LXXIII	51 k
LXXIV	51 d
LXXV	87 g
LXXVI	87 f
LXXVII	88 g
LXXVIII	88 h
LXXIX	87 t
LXXX	89 m
LXXXI	89 b
LXXXII	89 a
LXXXIII	99 b
LXXXIV	36 n
LXXXV	36 g
LXXXVI	86 e
LXXXVII	86 f
LXXXVIII	86 d
LXXXIX	88 g
XC	20 h
XCI	20 h
XCII	19 v
XCIII	27 r
XCIV	27 h 31 m
XCV	27 d
XCVI	14 j
XCVII	14 l
XCVIII	13 f
XCIX	13 g
C	37 j 37 e
CI	14 y
CII	98 m
CIII	3 m 2 d
CIV	3 f 16 n
CV	3 g 16 n
CVI	14 e
CVII	13 m
CVIII	3 l
CIX	3 k
CX	1 f 2 b
CXI	1 x
CXII	12 t
CXIII	?
CXIV	11 d
CXV	37 f 37 n
CXVI	?
CXVII	9 h
Sonder typ I	99 f

STONE

JUNKER	CORPUS
I	80 b
II	72 c
III	72 h
IV	71 g 71 m
V	52 b 55 a
VI	54 n
VII	54 v
VIII	61 l
IX	64 g
X	61 j
XI	64 h
XII	?
XIII	14 b
XIV	24 l
XV	13 p
XVI	9 t
XVII	27 g
XVIII	19 c
XIX	13 b
XX	27 m
XXI	42 k
XXII	25 c

PETRIE, NAQADEH POTTERY.

P

NAQ.	CORP.
1a	12 n 12 p
1b	12 u
1f	12 r
1g	12 d
4	24 f
5a	12 s
11a	17 l
14c	2 b
14d	2 d
16	13 k
17	3 f
22a	13 g
22m	29 dm
23a	14 j 27 h
23b	27 g p
23h	17 g
24h	18 m
25d	19 w
25e	19 u
25f	19 s 27 m
28e	27 k
28n	25 m
31b	88 h
41b	95 b

R

NAQ.	CORP.
16	1 w
1c	1 x
3a	8 v
6	54 k
9a	70 g
9b	70 d
12b	87 v
16	86 k
20	8
21a	1 s
21b	1 u
21d	1 t
21f	36 c
22a	13 d
22b	3 k
23a	13 a
23b	13 c
24	3 d
26	3 g
28	3 b
31	9
32a	18 k
34f	14 d
42c	33 r
45	92 s
57c	88 u
57g	88 f
61a	88 m
61b	89 m
63c	86 d
64	88 s
65a	88 g
72	95 g
73	76 m
76	66 b
77a	54 g
82	54 e
83	54 u
84	90
87b	94 n

L

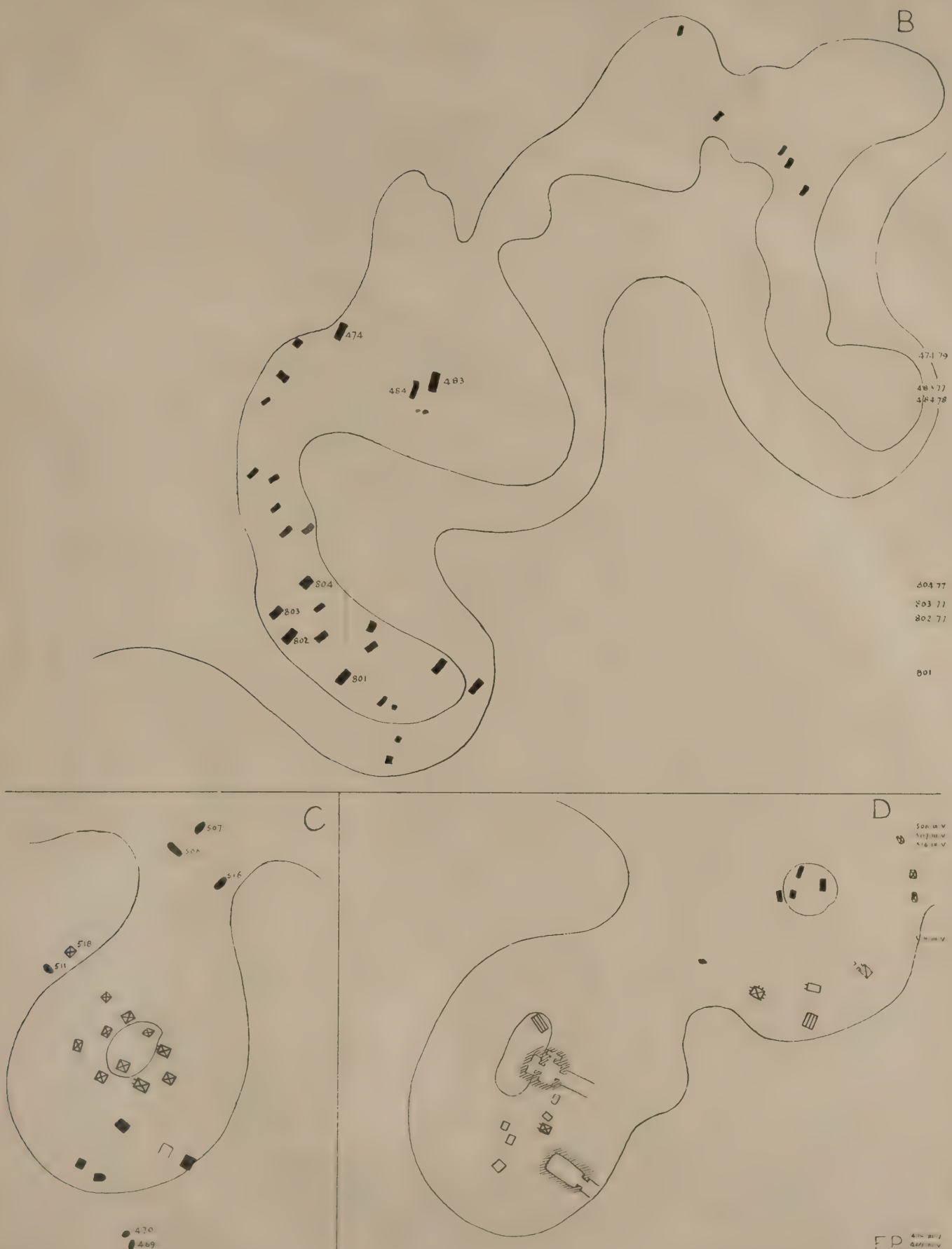
NAQ.	CORP.
1d	1 d
2a	12 l
2b	12 t
2d	12 h
4	25 d
6a	16 l
6b	16 b
7a	16 h
7b	16 d
7c	16 j
7d	16 n
8	16 p
9	16 t
9c	33 g
10	3 m
12a	13 b
12b	13 f
12c	13 g
14	14 d
16a	18 f
16g	18 b
17a	20 d
17b	20 h
17c	20 e
18	19 f
19a	19 l
19b	19 j
20	24 d
21	24 h
22	20 f
24	79 d
26a	16 r
26b	12 y
28a	2 k
28b	1 k
29a	1 d
29b	1 b
30b	56 b
30c	56 h
30m	56 h
30n	56 b
30p	56 f
30q	56 d
30s	56 n
31a	55
31c	65 h
33	70 b

L

NAQ.	CORP.
34a	72 g
34b	72 d
" c	70 n
" d	70 r
" g	73 f
" m	57 g
" n	57 v
" p	57 b
35	71
36a	60 d
" b	60 b
" d	60 g
" f	63 b
" g	60 k
" k	60 n
37a	65 b
" g	" fl
" h	"mn
" m	" w
" n	" t
38a	59 b
" b	" d
" c	" f
" e	" k
" g	" t
" h	" p
" j	" m
" k	63 de
" l	" g
" m	" l
" p	" p
" r	" n
39a	64 h
39c	64 d
41	81 f
42	87 h
43	81 f
44a	82 g
44c	77
46	82 c
53a	92 j
53b	92 m
53c	92 f
54a	56 h
54b	56 j
55b	57 b
94a	85 f
94b	85 c

0
1
2
3
4 MILES
CEMETERY
KAFR TARKHAN
KAFR AMMAR
KAFR TURKI
CANALS
RAILWAY
NILE
DESERT
GERZEH
PREHISTORIC
XVIII DYN.
1:5000
DESERT
A
81
78-80
FARM
B
77-9
C
D
PTOL
E
F
III-V
XI
J
78-81
79-81
77-80
G
78-9
H
78-80
VALLEY
CULTIVATION
K
N
77
1060
P
R
S
XXV
M
78-80
L
77-8
PT. RO
Q
81
CULTIVATION
0
200
400
600
800
1000 FEET
1200
1/4 MILE
F. P.

A
GRAVE
5 D
285
297
278
189
KA
261
267
287
275
422
410
423
408
404
420
411
419
415
412
421
NARMER
414
265
261 78
267 78
287 80
401 80
275 78
404 79
422 80
408 78
410 80
411 79
420 78
423 79
419 80
415 80
421 80
412 78
414 78
F.P


B
474
484
483
804
803
802
801
C
507
516
518
511
470
469
D

1 : 600

TARKHAN. CEMETERY, HILL E.

LXXII.

95 X1

215 III-V

222 III-V
467 III V
479 VI
473 X1
466
87
86 77
225 III-V

215 III V
221 III-V
468 III-V
475
485 III-V
32

24 82
480 III-V

29 III
216 III-V
84
253 III-V

34 III V

252 78
465 III-V
523 80

241 III V

70 79
68 77
527 77
525

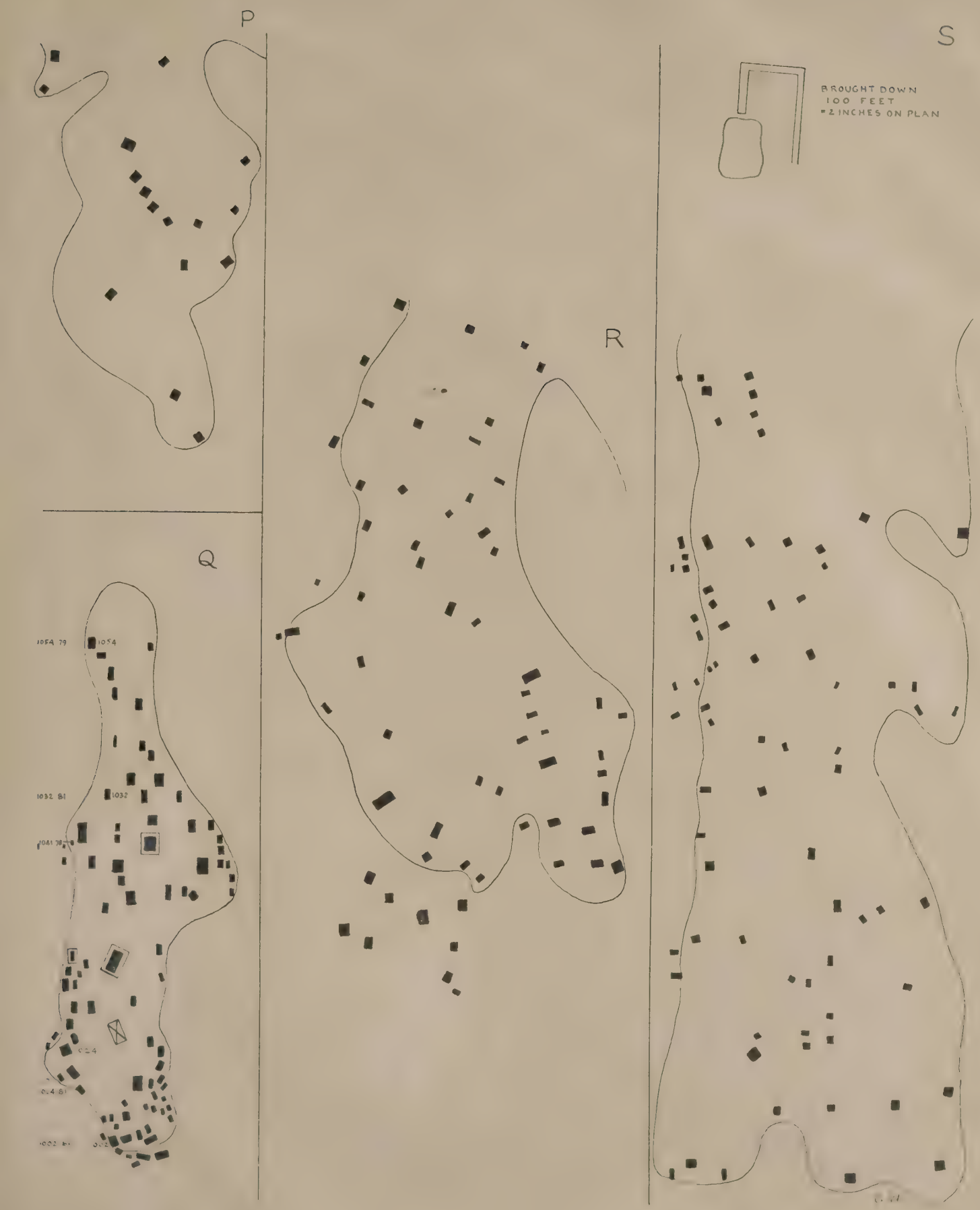
F.P.

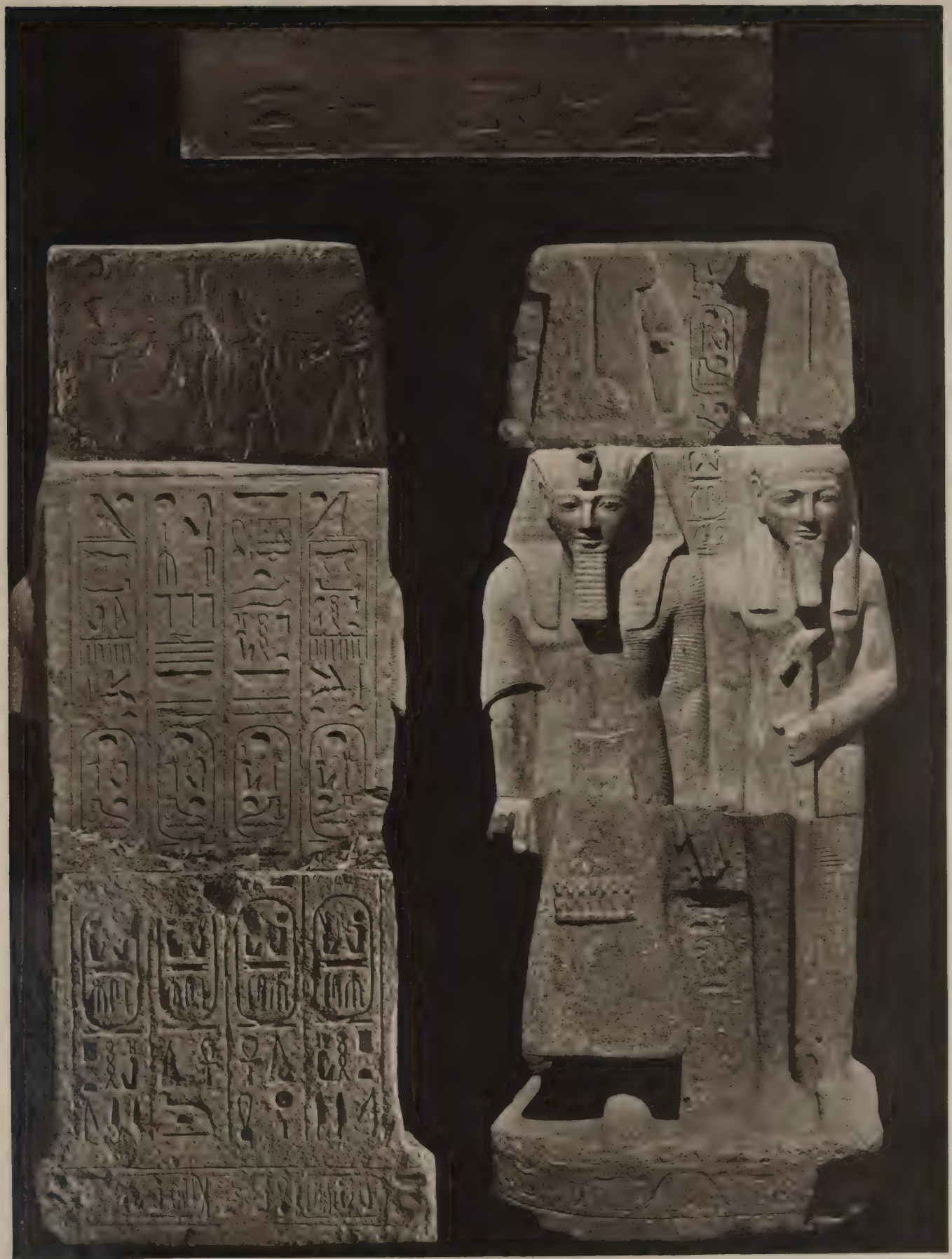
F
22
490
489
491
494
492
497
509
10
36
17
X1
40
23
512
513
42
27
7
9
39
21
22 490 X1
489 X1
494 X1
491 X1
492 X1
10 78
36 78
497 X1
509 X1
17 80
40 77
23 77-8
512 81
513 80
42 78
27 78
7 78
9 78
39 78
21 79

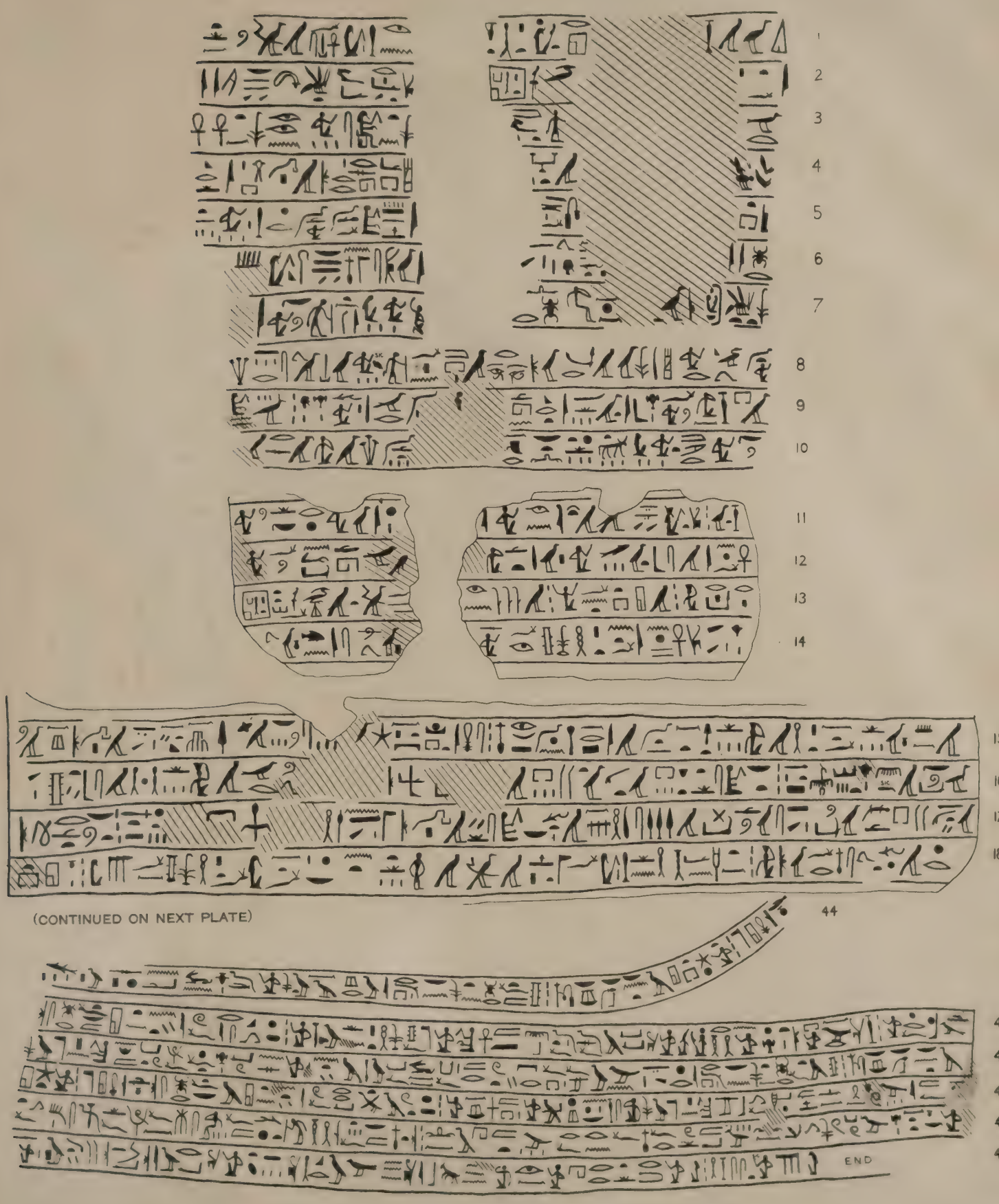
GRAVE 20 39 26 38 37 19 16 12 15 5
S·D· 78 78 78 78 78 79 78 79 78 79
G
H
91 900 901 90 330 902 903 13 2 11 1 3
80 80 78 81 80 78 80 79 77-81
29
20
26
19
38
16
15
5
12
37
D
91
901
90
902
900
330
903
SURPLUS POTTERY
13
2
11
1
3
F P.

J
602 X1
134 X1
603 X1
125 125 79
172
160
105
122
161
151
156
109
121
117
129
120
119
118
170
171
201 201 79
200 200 91
158
158 81
166 166 79
101
170
150
139
113
115
140
177
XXIII.
154
155
64
142
59
173
175
144
122 79
160 81
122 81
161 79
151 79
156 79
109 80
129 80
117 81
121 78
120 81
119 78
118 80
101 81
170 80
150 81
139 80
113 80
115 81
140 79
177 80
154 80
4 9
170 80
171 80
155 82
64 81
142 80
59 81
173 81
175 79

K
328
350
351
333
L
185
185 77
349
349 XXV
304
304 79
343
343 Ro
336
336 78
BES NECKLACE
BED
PTOL
PTOL
345
344
UPSET GRAVES
332
332 Ro
331
315
315 77
340
340 Ro
355
355 Pt
339
339 Pt
PTOL
M
1041 78
1041
1026 80
1026
1042 78
1042
N
862
862 77
860
860 77
861
861 77
72
77
247
75
74
F P
O
105?
105 81
186?
186 77
106?
C W


P
S
BROUGHT DOWN
100 FEET
= 2 INCHES ON PLAN
R
Q
1054 79
1054
1032 81
1032





(CONTINUED ON NEXT PLATE)

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..	ARSINOE	..
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1889-90	GUROB	..
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1892	TELL EL AMARNA	TELL EL AMARNA
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..	NAQADEH	..
1896	THEBES	SIX TEMPLES AT THEBES
1896	RAMESSEUM	THE RAMESSEUM.
1897	DESHASHEH	DESHASHEH
..	OXYRHYNKHOS	..
.	EL KAB	EL KAB
1898	DENDEREH	DENDEREH
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1901	..	ROYAL TOMBS II
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..	MAHASNEH	..
1902	ABYDOS TEMPLE	ABYDOS I
.		TEMPLE OF THE KINGS.
1903		ABYDOS II., THE OSIREION
1904	EHNASYA	EHNASYA.
	BUTO	..
1904-5	SAQQAREH	SAQQARA MASTABAS I AND II.
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.	GOSHEN	..
.	RAMSES	..
	SHAGHANBEH	..
..	GHEYTA	..
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.	RIFEH	..
	HAGARSEH	..
..	BALYZEH	..
	ZARABY	..
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	MEMPHIS	MEMPHIS II
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	MEMPHIS	..
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.	LABYRINTH	..
	MAZGHUNEH	..
1912	TARKHAN	TARKHAN I AND MEMPHIS V.
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	SHURAFEH	..
	HELIOPOLIS	..

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